ť.3

STR

$$0 = 0$$

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 4 :

STEREO ATTRIBUTES: NONE

L4

STR

O ..... C ... C 24 @ 25 @ 26 ©==C @27 @28

VAR G1=0/S/25-13 26-18/26-13 25-18/27-13 28-18/C

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 28

STEREO ATTRIBUTES: NONE

C. HILL DOX.	
1.5	SCR 2043 1
L7. 9925	SEA FILE=REGISTRY SSS FUL L3 AND L4 AND L5
L13 738	SEA FILE=REGISTRY ABB=CN PLU=ON L7 AND 1/NC
L14 9187	SEA FILE=REGISTRY ABB=ON PLU=ON L7 NOT L13
L15 5589	SEA FILE=HCAPLUS ABB=ON PLU=ON L14
L17 21828	SEA FILE-HCAPLUS ABB=ON PLU=ON LENSES+PFT, NT, OLD, NEW/CT
L18 · 5726	SEA FILE=HCAPLUS ABB=ON PLU=ON "PHOTOCHROMIC MATERIALS"+P
	FT, NT, OLD, NEW/CT;
L19 414	SEA FILE=#CAPLUS ABB=ON PLU=ON "PHOTOCHROMIC LENSES"+PFT,
	NT, OLD, NEW/CT
L20 692	SEA FILE=HCAPLUS ABB=ON PLU=ON L15 AND (L17 OR L18 OR
	L19)
	SEA FILE=HCAPLUS ABB=ON PLU=ON L20 AND PHARM?/SC.SX
	SEA FILE=HCAPLUS ABB=ON PLU=ON L21 AND THU/RL
L24 49	SEA FILE=HCAPLUS ABB=ON PLU=ON L22 AND (1840-2003)/PRY.AY

. PY

### => d 124 1-49 ibib ed abs hitstr hitind-

L24 ANSWER 1 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:1037058 HCAPLUS Full-text

DOCUMENT NUMBER: 142:23644

TITLE: (meth)acrylic ester compounds for dental materials

and optical parts with good curability, transparency, roentgenograph stability, and

flexural strength, and low shrinkage

INVENTOR(S): Otsuji, Atsuo, Takagi, Masatoshi, Higuchi,

Chojiro; Nagatomo, Akinori; Suesugi, Kouji; Toida,

Tetsuya; Honda, Narimichi

PATENT ASSIGNEE(S): Mitsui Chemicals, Inc., Japan.

SOURCE: PCT Int. Appl., 129 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICA	ATION NO.	DATE
WO 2004103949	A1 2	20041202	WO 200	4-JP7327:	20040521
W: AE, AG, AL,	AM, AT,	AU, AZ,	BA, BB, B	G, BR, BW,	BY, BZ, CA,
CH; CN; CO;					
GB, GD, GE,					
KR, KZ, LC,					
MX; MZ, NA;			•	1	
SE, SG, SK,			TN, TR, T	Γ, TZ, UA,	UG, US, UZ,
VC, VN, YU.					
RW: BW, GH, GM,	,,, ,				
AM, AZ, BY,					
DE, DK, EE,	3				
PT, RO, SE,			BJ., CF., C	3, CL, CM,	GA, GN, GQ,
GW, ML, MR,					20212527
EP 1627867	A1.	20060222	EP 200	1-734424	20040521
ם, אם עם כפ	Treffe			S	
R DE, FR, GB, CN 1795166		20060628	CM (200)	1-80014166	20040521
CN 1755100		20000020	CIV 200	2	20010321
US 2007078198	Al .	20070405	US 200	5-557882 .	20051122
PRICRITY APPLN. INFO.:				3-145616	A 20030523
			JP 200	3-284921	A 20030801
			JP 200	3-356465	A 20031016
			WO 200	1-JP7327 .	W 20040521

OTHER SOURCE(S): MARPAT 142:23644

ED Entered STN: 03 Dec 2004

GΙ

R12
R13\_O\_CH<sub>2</sub>
$$c$$
\_CH<sub>2</sub>-X11\_R11\_X11\_CH<sub>2</sub> $c$ \_CH<sub>2</sub>-O\_R13

 $c$ \_CH<sub>2</sub>
 $c$ \_CH

The present invention relates to (meth)acrylic ester compds. I, wherein R11 = AB divalent aromatic group; R12, R14 = H or methyl; R13 = aryl; and X11 = O or S. Polymerizable compns. containing the (meth)acrylic ester compds. can be polymerized and molded in a short time by photopolymn. It gives a cured resin satisfactory in transparency, optical properties (refractive index and Abbe's number), heat resistance, mech. properties, etc. Also provided is an optical part obtained by polymerizing the polymerizable compns. Thus, 68.1 g 4phenylphenol and 44.4 g resorcincl diglycidyl ether were reacted in the presence of sodium hydroxide, the resulting compound was reacted with 3chloropropionyl chloride, and dehydrochlorinated to give a diacrylate monomer 80.70 parts of which was mixed with 2,2-bis(4methacrylcyloxypolyethoxyphenyl)propane 30; camphorquinone 0.5; Et N, Ndimethylaminobenzoate 0.5, silane treated glass comprising silicon dioxide, barium oxide, boron oxide, and aluminum oxide 400, and Aerosil R 812 silane treated colloidal silica 20 parts and radiation-cured to give a test piece with refractive index 1.60, flexural strength 124 MPa, light transmittance 13.4%, good roentgenograph stability, and low shrinkage.

IT 799261-54-4P 799261-56-6P 799261-57-7P 799261-58-8P 799261-60-2P 799261-62-4P 799261-64-6P 799261-66-8P 799261-67-9P 799261-69-1P 799261-71-5P 799261-73-7P

(methacrylic ester compds. for dental materials and optical parts with good curability, transparency, roentgenograph stability, and flexural strength, and low shrinkage)

RN 799261-54-4 HCAPLUS

2-Propenoic acid, 1,3-phenylenebis[oxy[1-[([1,1'-biphenyl]-4-yloxy)methyl]-2,1-ethanediyl]] ester, polymer with  $\alpha,\alpha'$ -[(1-methylethylidene)di-4,1-phenylene]bis[ $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] (9CI) (CA INDE) NAME)

CM . 1

CRN 799261-42-0 CMF C42 H38 O8

PAGE: 1-B

- Ph

CM

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

PMS CCI

799261-56-6 HCAPLUS RN

2-Propenoic acid, 1,3-phenylenebis [oxy[1-[(1-naphthalenyloxy)methyl]-CN

2,1-ethanediyl]] ester, polymer with  $\alpha,\alpha'$ -[(1--

methylethylidene) di-4, 1-phenylene] bis  $[\omega - (2-methyl-1-oxo-2-methyl-1)]$ 

propenyl) oxylpoly (oxy-1,2-ethanediyl)] (9C1): (CA INDEX NAME)

.CM:

799261-43-1 CRN C38 H34 O8

CM . 2

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

CCI PMS

PAGE 1-B

RN 799261-57-7 HCAPLUS

CN 2-Propenoic acid, 1,3-phenylenebis[oxy[1-[(4-phenoxyphenoxy)methyl]2,1-ethanediyl]] ester, polymer with α,α!-[(1methylethylidene)di-4,1-phenylene]bis[o-[(2-methyl-1-oxo-2propenyl)oxy!poly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM... 1

CRN 799261-46-4 CMF C42 H38 010

PAGE 1-B ..

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

CCI PMS

$$Me = C = C = C + 2 = C + 3 = C$$

$$Me = C = C + 2 = C + 3 = C$$

$$Me = C = C + 2 = C + 3 = C$$

$$Me = C = C + 3 = C$$

$$Me = C = C + 3 = C$$

$$Me = C = C + 3 = C$$

$$Me = C = C + 3 = C$$

799261-58-8 HCAPLUS

2-Propencic acid, 1.3-phenylenebis[oxy[1-[([1,1]-biphenyl]-2yloxy)methyl]-2,1-ethanediyl]] ester, polymer with

 $\alpha, \alpha' - [(1 - methylethylidene) di-4, 1-phenylene] bis [<math>\omega - [(2 - methylethylidene)]$ 

methyl-1-oxo-2-propenyl)oxylpoly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX

NAME)

CM 1.

CRN 799261-45-3 CMF C42 H38 O8

$$H_2C = CH - C - O$$
 $O - CH_2 - CH - CH_2 - O$ 
 $O - CH_2 - CH - CH_2 - O$ 
 $O - CH_2 - CH - CH_2 - O$ 
 $O - CH_2 - CH - CH_2 - O$ 
 $O - CH_2 - CH_2 - CH_2 - O$ 
 $O - CH_2 - O$ 
 $O - CH_2 - CH_2 - O$ 
 $O - CH_2 - O$ 

CM 2

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

CCI PMS

$$\begin{array}{c|c} -CH2 & \hline \\ \hline \\ n & \end{array} \begin{array}{c} CH2 \\ \hline \\ \end{array} \begin{array}{c} CH2 \\ \hline \\ \end{array}$$

PAGE 1-B

RN 799261-60-2 HCAPLUS
CN 2-Propencic acid, 1,3 phenylenebis[oxy[1-[(2-naphthalenyloxy)methyl]2,1-ethanediyl]] ester, polymer with α,α\*-[(1methylethylidene)di-4,1-phenylene]bis[ω-[(2-methyl-1-oxo-2propenyl)oxy]poly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM :

CRN 799261-44-2 CMF C38 H34 O8

PAGE 1-A

PAGE 1-B

PAGE 1-B

CM 2

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 C)n C23 H24 O4

CCI PMS

RN 799261-62-4 HCAPLUS

CN 2-Propenoic acid, (3,3',5.5'-tetramethyl[1,1'-biphenyl]-4,4'-diyl)bis[oxy[1-[([T,1'-biphenyl]-4-yloxy)methyl]-2,1-ethanediyl]] ester, polymer with \(\alpha\).\(\alpha'-[(1-methylethylidene)di-4,1-phenylene]\)bis[\(\omega-[(2-methyl-1-oxo-2-propenyl)oxy]\)poly(oxy-1,2-ethanediyl)] (9C1) (CA INDEX NAME)

CM 1

CRN 799261-47-5 CMF C52 H50 O8

PAGE 1-A

PAGE 1-B

., CM .. 2

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

CCI PMS.

PAGE 1-B

RN 799261-64-6 HCAPLUS

CN 2-Propenoic acid, (3,3',5,5'-tecramethyl[1,1'-biphenyl]-4,4'-diyl) bis [oxy[1-[([1,1'-biphenyl]-2-yloxy)methyl]-2,1-ethanediyl]] ester, polymer with  $\alpha,\alpha'-[(1-\text{methylethylidene})\text{di}-4,1-$ 

# 10/549,696

phenylene]bis[ $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM I

CRN 799261-48-6 CMF C52 H50 O8

PAGE 1-A

0
0
C— CH— CH2
Ph

Me

Me

Me

Me

Me

Me

Me

Me

PAGE 1-B

CM 2 ...

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 Q4

CCI PMS

O CH2 — CH2 — C — C — Me PAGE 1-B

RN 799261-66-8 HCAPLUS

N 2-Propenoic acid, [1,1'-biphenyl]-4,4'-diylbis[oxy[1-(phenoxymethyl)-2,1-ethanediyl]] ester, polymer with  $\alpha,\alpha'$ -[(1-

methylethylidene) di-4,1-phenylene] bis  $[\omega-[(2-methyl-1-oxo-2-propenyl) oxy]$  poly (oxy-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 799261-49-7 CMF C36 H34 O8

CM 2

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

CCI PMS

PAGE 1-B

RN 799261-67-9 HCAPLUS

methyl-1-0x0-2-propenyl)oxylpoly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

'CM' 1

799261-52-2 CRN CMF C44 H42 O8

CM ...2

CRN

41637-38-1 (C2 H4 O)n (C2 H4 O)n C23 H24 O4 CMF

PMS CCI

PAGE 1.- 8

RN - 799261-69-1 HCAPLUS

2-Propendic acid. thiobis [4,1-phenyleneoxy[1-(phenoxymethyl) 2,1ethanedivie) ester, polymer with  $\alpha,\alpha'$  -[(1-

methyletnylidene) di 4,1-phenylene] bis [ $\omega$ -[(2-methyl-1- $\infty$  $\sigma$ -2+ propenyl) oxy] poly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM

CRN 799261-50-0 CMF C36 H34 O8 S

CM 2

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

CCI · PMS

$$\begin{array}{c|c} & O & CH_2 \\ \hline & CH_2 & \hline & n & O & C - C - Me \end{array}$$

PAGE 1-B

RN 799261-71-5 HCAPLUS:
CN 2-Propenoic acid, sulfonylbis[4,1-phenyleneoxy[1-(phenoxymethyl)/2,1ethanediyl]] ester, polymer with α,α'-[(1methylethylidene)di-4,1-phenylene]bis[ω-[(2-methyl-1-oxo-2propenyl)oxylpoly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM

CRN 799261-51-1 CMF C36 H34 C10 S

CM 2

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

CCI PMS

 $\begin{array}{c|c} \text{PAGE 1-A} \\ \text{Me} = C - C - O - CH_2 - CH_2 - CH_2 - O \\ \hline \end{array}$ 

O CH2

PAGE 1-B

CM

CRN 799261-53-3

CMF C49 H42 O8 /

CM 2

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

CCI. PMS

PAGE 1-A

$$\begin{array}{c|c} \text{H2C} & \text{O} \\ \text{Me-C-C-O} & \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{O} \\ \text{Me} & \text{Me} \end{array}$$

PAGE 1-B

IC ICM C07C069-54

ICS C07C043-23; C07C069-63; C07C323-20; C07C317-22; C08F020-30; A61C013-087; G02B001-04

CC 35-2 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 38, 63, 73

IT Dental materials and appliances

Lenses

Optical instruments

Optical materials.

Transparent materials

(methacrylic ester compds. for dental materials and optical parts with good curability, transparency, rountgenograph stability, and flexural strength, and low shrinkage)

TT 799261-54-4P 799261-55-5P 799261-56-6P

799261-57-7P 799261-58-8P 799261-60-2P

799261-62-4P 799261-64-6P 795261-66-5P

7.99261-67-9P 799261-69-19 799261-71959

799261-73-7P

(methacrylic ester compds. for dental materials and optical parts with good curability, transparency, reentgenograph stability, and flexural strength, and low shrinkage)

REFERENCE COUNT:

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 2 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:799609 HCAPLUS Full-text

DOCUMENT NUMBER: 141:320144

TITLE: Polymerization curable compositions for

photochromic lenses

INVENTOR(S):

Takenaka, Junji; Nagoh, Hironobu; Momoda, Junji

PATENT ASSIGNEE (S) : Tokuyama Corporation. Japan

SOURCE: PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2004083268	A1 20040930	WO 2004-JP3539	20040317
CH, CN, CO, GB, GD, GE, KZ, LC, LK, MZ, NA, NI,	CR, CU, CZ, DE, GH, GM, HR, HU, LR, LS, LT, LU, NO, NZ, OM, PG,	BA, BB, BG, BR, BW, BY DK, DM, DZ, EC, EE, EG ID, IL, IN, IS, KE, KG LV, MA, MD, MG, MK, MN PH, PL, PT, RO, RU, SC	, ES, FI, , KP, KR, , MW, MX, , SD, SE,
VN, YU, ZA, RW: BW, GH, GM, AZ, BY, KG, DK, EE, ES,	ZM, ZW KE, LS, MW, MZ, KZ, MD, RU, TJ, FI, FR, GB, GR, SK, TR, BF, BJ,	TR, TT, TZ, UA, UG, US  SD, SL, SZ, TZ, UG, ZM  TM, AT, BE, BG, CH, CY  HU, IE, IT, LU, MC, NL  CF, CG, CI, CM, GA, GN	, ZW, AM, , CZ, DE, , PL, PT,
JP 2004285141  JP 2005068192	A 20041014	JP 2003-77114	20030320
AÚ 2004221975	A1 20040930		20040317
EP 1607418		nakiliji na ir k <del>aji</del> liji na lage	20040317
		GB, GR, IT, LI, LU, NL MK, CY, AL, TR, BG, CZ	
CN 1738842 US 2006182977		CN 2004-80002200 < US 2005-549696	20040317
PRIORITY APPLN INFO.:	20000013	JP 2003-77114	A 20030320
			A 20030826
		WO 2004-JP3539	A 20040317

ED Entered STN: 30 Sep 2004

Disclosed are a polymerization curable composition which comprises a specific polyfunctionally polymerizable monomer having a mol. structure affording a ... polymer having a L scale Rockwell's hardness of 60 or more by homopolymn., an another specific polyfunctionally polymerizable monomer and a photochromic. compound; a base material for a photochromic lens comprising the cured product from the composition; and a lens using the base material. The base material and the lens exhibit a high coloring d., a high color disappearance rate and good photochromic characteristics, and are excellent in characteristics of the base material such as hardness, heat resistance and impact resistance of a cured product, and further has such a strength (toughness) sufficient for use in a rimless spectacle. A mixture containing trimethylolpropane trimethacrylate 10, 2,2-bis(4-methacryloyloxypolyethoxyphenyl)propane 60, nonaethyleneglycol diacrylate 20, glycidyl methacrylate 10, chromene 1 0.04, perbutyl ND 1 parts was applied to a lens mold and thermally polymerized at 90° for 5 h. The cured material was coated with a buffer layer coating solution containing Desmodur BL 3475 and Desmoblen 670BA and cured at 110° for

#### 10/549,696

30 min. Then, a hard coat solution TS-56H was applied to the material and cured at 120° for 3 h to obtain a photochromic lense. 7.65929-30-4P-765929-31-5P-765929-32-6P IT 765929-33-7P 765929-34-8P 765929-35-9P 765929-36-0P 765929-37-1P 765929-39-3P 765929-40-6P 767330-18-7P (polymerization curable compns. for photochromic lenses) RŃ 765929-30-4 HCAPLUS 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-CN propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with (1-methylethenyl)benzene, (1-methylethenyl)benzene dimer,  $\alpha, \alpha'$  - [(1-methylethylidene)di-4,1-phenylene]bis[ $\omega$ -[(2methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)], oxiranylmethyl 2-methyl-2-propenoate, oxybis(2,1-ethanediyloxy-2,1-ethanediyl) bis(2-methyl-2-propenoate) and oxybis(2,1-ethanediyloxy-2,1ethanediyl) di-2-propenoate (9CT) (CA INDEX NAME)

CM I

CRN 41637-38-1 CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4 GCI PMS

....СH2. Пр. С. С. Ме PAGE 1 - B

.CM -

CRN 17831-71-9 CMF C14 H22 O7

--- CH=== CH2

CM 3

CRN 3290-92-4 CMF C18 H26 O6

CM .

CRN 109-17-1 CMF C16 H26 O7

PAGE 1-A
H2C 0 0 CH2
Me-C-C-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-

PAGE 1-B

<u> —</u> М.е

CM 5

CRN 106-91-2 CMF C7 H10 O3

```
CM 6
```

CRN 98-83-9 CMF C9 H10

CH<sub>2</sub> || Ph—C—Me

CM 7

CRN 6144-04-3 CMF (C9 H10)2 CCI PMS

.CM 8

CRN 98-83-9 CMF C9 H10

CH2:: Ph-C-Me

RN 765929-31-5 HCAPIUS

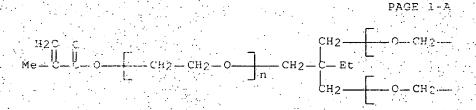
CN 2-Propenoic acid, 2-methyl-, oxybis(2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with α-hydro-ω-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), (1-methylethenyl)benzene; (1-methylethenyl)benzene dimer, α,α'-[(1-methylethenyl)benzene dimer, α,α'-[(1-methylethylidene)di-4,1-phenylene]bis[ω-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)], oxiranylmethyl 2-methyl-2-propenoate and oxybis(2,1-ethanediyloxy-2,1-ethanediyl) di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 82727-34-2

CMF (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n C18 H26 O6

CCI PMS



PAGE 1-B

CM 2

CRN 41637-38-1

.. CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

- CCI PMS

$$\begin{array}{c|c} & O & CH_2 \\ \hline & & O & CH_2 \\ \hline & & & O & CH_2 \\ \hline \end{array}$$

PAGE: 1-B

CM

CRN 17831-71-9 CMF C14 H22 O7

— CH === CH2

CM 4

CRN 109-17-1 CMF C16 H26 O7

PAGE 1-A

H2C 0 CH2

MG-U-C-O-CH2-CH2-O-CH2-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH2-CH2-O-CH

PAGE 1-B

-- Me

CM ..5

CRN 106-91-2 CMF C7 H10 O3

O CH2 CH2-O-C-C-Me

CM 6

CRN 98-83-9 CMF C9 H10

CH2 Ph-C-Me

CM: 7

CRN 6144-04-3 CMF (C9 H10)2 CCI PMS CM 8 CRN 98-83-9 CMF C9 H10

CH<sub>2</sub> Ph\_C\_Me

CM.

RN 765929-32-6 HCAPLUS
2-Propensic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with
 (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)]
 bis(2-methyl-2-propenoate), (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate, (1-methylethenyl)benzene,
 (1-methylethenyl)benzene dimer, α,α'-[(1-methylethenyl)benzene,
 methylethylidene)di-4,1-phenylene]bis[ω-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] and oxiranylmethyl
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CRN 51247-87-1 CMF C17 H28 O6 CCI IDS

3 ( D1\_Me )

CM 2 CRN 42978-66-5 CMF C15 H24 O6

IDS

CCI

Ч2С== CH - C-O- CH2 - CH2 - O- CH2

3 ( D1-Me.)

PAGE 1 - B

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

$$H_2C$$
  $O$   $H_2C$   $O$   $CH_2$   $CH_2$   $O$   $Me$   $Me$   $Me$ 

CRN 3290-92-4

CMF C18 H26 O6

CRN 106-91-2 CMF C7 H10 03

```
CM 6
CRN 98-83-9
CMF C9 H10
```

CH2 Ph\_C\_Me

CM 7

CRN 6144-04-3

CMF (C9 H10)2

CCI PMS

CM 8

CRN 98-83-9

CMF C9 H10

CH<sub>2</sub> Ph\_C\_Me

RN 765929-33-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with (1-methylethenyl)benzene, (1-methylethenyl)benzene dimer, α,α'-[(2-methylethylidene)di-4,1-phenylene]bis[ω-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)], 3,6,9,12,15,18,21,24-octaoxahexacosane-1,26-diyl di-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and oxybis(2,1-ethanediyloxy-2,1-ethanediyl) bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CRN 57491-53-9 CMF C24 H42 O12

CM 1

## 10/549,696

PAGE 1-C

PAGE 1-B

\_\_\_Сн=== СН 2

CM 2

CRN. 41637-38-1.

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

CCI PMS

$$\begin{array}{c|c} & \text{CH}_2 \\ \hline & \text{CH}_2 \\ \hline & \text{D} \end{array} \begin{array}{c} \text{O} & \text{CH}_2 \\ \text{L} \\ \text{Me} \end{array}$$

CM . 3

CRN 3290-92 4 CMF C18 H26 C6

CM 4

CRN 109-17-1 CMF C16 H26 O7

PAGE 1-B

....Ме

$$\begin{array}{c} \text{O} & \text{O} & \text{CH}_2\\ \text{CH}_2 - \text{O} - \text{C} - \text{C} - \text{Me} \end{array}$$

CRN 98-83-9 CMF C9 H10

RN 765929-34-8 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with (1-methylethenyl)benzene, (1-methylethenyl)benzene dimer, 

\[ \alpha \, \alpha' - [(1-methylethylidene) \, \did \

CM 1

CRN 41637-38-1

CMF (C2. H4 O)n (C2. H4 O)n C23 H24 O4

CCI PMS

PAGE 1-B

CM: 2

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

CCI PMS

CM 3

CRN 3290-92-4 CMF C18 H26 O6

CM 4

CRN 109-17-1 CMF C16 H26 O7

PAGE 1-B

--Me

CM 5 ,

CKN 106-91-2 CMF C7 H10 O3

```
CM 6
```

CRN 98-83-9 CMF C9 H10

.CM '

CRN 6144-04-3 CMF (C9 H10)2

CCI PMS

CM 8

CRN 98-83-9 CMF 69 H10

CH2 Ph-U-Me

RN. 765929-35-9 HCAPLUS .

CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-T,3-propanediyl ester, polymer with (1-methylethenyl)benzene, (1-methylethenyl)benzene dimer, a;a-[(1-methylethylidene)di-4,1-phenylene]bis[w-[(2-methyl-1 oxc 2-propenyl)oxy]poly(oxy-1,2-ethanediyl)], a-methyl-w-(2-propenyloxy)poly(oxy-1,2-ethanediyl), oxiranylmethyl 2-methyl-2-propenoate and oxybis(2,1-ethanediyloxy-2,1-

ethanediyl) bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM :

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

CCI PMS

CM 2

CRN 27252-80-8

CMF .. (C2 H4 O) n C4 H8 O

CCI PMS

$$H_2C$$
  $CH_2$   $CH_2$   $CH_2$   $CH_2$   $CH_2$   $O$   $Me$ 

CM 3

CRN 3290-92-4 CMF C18 H26 O6

CM:

CRN 109-17-1 CMF C16 H26 07...

PACE 1-B

CRN 106-91-2 CMF C7 H10 O3

$$\begin{array}{c|c} C & O & CH_2 \\ \hline CH_2 - O - C - C - Me \end{array}$$

CM 6

CRN 98-83-9 CMF C9 H10

.CM . 7

CRN 6144-04-3 CMF (C9 H10)2 CCI PMS

CM 8

CRN 98-83-9: CMF C9 H10

RN 765929-36-0 MCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with α,α'-[(1-methylethylidene)di-4,1-phenylene]bis[ω-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM .

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4 CCI PMS

PAGE 1-A

PAGE - 1 - B.

$$-CH2 - nO - CH2 - Me$$

CM 2

CRN 3290-92-4 . CMF C18 H26 O6

CM . 3

CRN 106-91-2 CMF C7 H10 03

RN 765929-37-1 HCAPLUS

2 - Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with Ebecryl 1830, α,α'-[(1-methylethylidene)di-4,1-phenylene]bis[ω-[(2-

# 10/549,696

methyl-1-oxo-2-propenyl)oxylpoly(oxy-1,2-ethanediyl)] and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM .

CRN 146479-65-4 CMF Unspecified CCI PMS, MAN

#### \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM· 2

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

CCI PMS

$$\begin{array}{c|c} H_2C & O \\ Me - U - U - O - U - CH_2 - CH_2 - O \end{array}$$

#### PAGE 1-B

CM 3

CRN 3290-92-4 CMF C18 H26 O6

CM 4

CRN 106-91-2 CMF C7 H10 O3

RN 765929-39-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with
 α-hydro-ω-[(1-oxo-2-propenyl)oxy]poly[oxy(1-oxo-1,6 hexanediyl)] ester with 2,2'-[oxybis(methylene)]bis[2-ethyl-1,3 propanediol] (4:1), and α,α'-[(1-methylethylidene)di-4,1 phenylene]bis[ω-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2 ethanediyl)] (9CI) (CA INDEX NAME)

CM i

CRN 765929-38-2 CMF (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n C24 H34 O9 CCI PMS

PAGE 1-A

PAGE 1-B

CM 2.

CRN 41637-38-1 CMF (C2 H4 O)n (C2 H4 O)n C23 H24 C4 CCI PMS

PAGE 1-A

PAGE 1-8

CRN 106-91-2 CMF C7 H10 O3

765929-40-6 HCAPLUS

2 Propendic acid, 2-methyl-, 2-ethyl-2-[(2-methyl-1-oxo-2propenyl) oxyl methyl | -1,3-propanediyl ester; polymer with

 $\alpha, \alpha = [1-\text{methylethylidene}] \text{di-4,1-phenylene}] \text{bis} \{\omega \in [4] = 1\}$ 

methyl 1-cko-2-propenyl) oxylpoly (oxy-1,2-ethanediyl) ],

3, 5, 9, 12, 15, 18, 21, 24-octaoxahexacosane-1, 26-diyl di-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA-INDEX NAME)

CM.

CRN - 57491-53-5 CMF C2: U42 012

FAGE 1 A

-СИ-С-О-СИ2-СИ2-О-СИ2-СИ2-О-СИ2-СИ7-О-СИ3-СИ3-СИ3-

PAGE 1-C

--- CH ==== CH2

CM 2

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

CCI PMS

CM . 3

CRN 3290-92-4

CMF - C13 H26 06 -

CRN 106-91-2 CMF C7 H10.03

RN 767330-18-7 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,2-propanediyl ester, polymer with
α,α'-[(1-methylethylidene)di-4,1-phenylene]bis[ω-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)], oxiranylmethyl 2-methyl-2-propenoate and U 1084 (9CI) (CA INDEX NAME)

CM 1

CRN 765943-91-7 CMF Unspecified CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4.

CCI PMS

PAGE 1-B

CRN 3290-92-4 C18 H26 O6 CMF

CM

106-91-2 CRN CMF C7 H10 O3

IC ICM C08F220-28.

ICS G02C007-10

63-7 (Pharmaceuticals)

Section cross-reference(s): 35

IT. Lenses

> (photochromic; polymerization curable compns. for photochromic lenses)

IT. Photochromic materials

(polymerization cyrable compose for photochromic lenses)

765929-30-4P 765929-31-5P 765929-32-6P 765929-33-7P 765929-34-8P 765929-35-97

765929-36-0P 765929-37-1P 755929-39-3P

765929-40-6P 767330-18-7P

(polymerization curable compost for photochromic lenses)

THERE ARE 9 CITED REFERENCES AVAILABLE FOR REFERENCE COUNT:

THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L24 ANSWER 3 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

2004:780612 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 141:278674

TITLE: Photochromic multilayer body and coating method

for its production ...

INVENTOR (S): Izumi, Shinobu, Momoda, Junji

PATENT ASSIGNEE(S): : Tokuyama Corporation, Japan SOURCE:

PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

### 10/549.696

```
APPLICATION NO.
     PATENT NO.
                         KIND
                                DATE
                                                                   DATE
     WO 2004080714
                          Α1
                                20040923 WO 2004-JP3049
                                                                   20040309
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,
             CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
             GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR,
             KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
             MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
             SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE,
            DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
             ML, MR, NE, SN, TD, TG
                                           AU 2004-220183
    AU 2004220183
                          A1
                                20040923
                                                                   20040309
                                            JP 2004-66297
                                                                   20040309
     JP 2004295114
                                20041021
     EP 1612042.
                               20060104
                                           EP-2004-718743
                                                                   20040309
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LT, LU, NL, SE, MC,
            PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU,
           PL, SK
    US 2006263607
                         A1 20061123
                                          US 2006-547316
                                                                   20060530
PRIORITY APPLN: INFO.:
                                            JP 2003-62756
                                                                   20030310
                                            WO 2004-JP3049
                                                                A 20040309
```

ED Entered STN: 24 Sep 2004

AB. A photochromic multilayer body (e.g., sunglass lens) comprises a base composed of a translucent thermoplastic resin such as a polycarbonate resin, a crosslinked resin layer which is formed on a surface of the base and contains 20-40 mass% of inorg. colloidal particles, and a photochromic coating layer formed on a surface of the crosslinked resin layer. Although the photochromic layer is formed by coating process, whitening or swelling of the surface of the thermoplastic resin base is suppressed in this photochromic multilayer body. Consequently, excellent optical characteristics of the base are not damaged. In addition, since the photochromic coating layer has a good adhesion property, the photochromic multilayer body is excellent in durability.

IT 523272-59-39, Ebecryl 1830-NK Ester BPE 10-glycidyl methacrylate-NK Ester A 400-trimethyloloropane trimethacrylate copolymer

(photochromic coating; photochromic multilayer body and coating method for its production)

RN 521272-59-3 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-ethyl-2-[((2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with Ebecryl 1830, α,α'-[(1-methylethylidene)di-4,1-phenylene]bis[ω-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)], oxiranylmethyl 2-methyl-2-propenoate and α (1-oxo-2-propenyl)-ω-[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) (9Cl) (CA INDEX NAME)

CM 1

CRN 146479-65-4

.CMF. .Unspecified CCI PMS, MAN

# \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CRN 41637-38-1

(C2 H4 O)n (C2 H4 O)n C23 H24 O4 CMF

CCI PMS

$$\begin{array}{c|c} \text{PAGE 1-A} \\ \text{Me-C-C-O} & \begin{array}{c} \text{CH}_2 - \text{CH}_2 - \text{C} \\ \end{array} \\ \text{Me} & \begin{array}{c} \text{Me} \\ \text{Me} \end{array} \end{array}$$

PAGE 1-B

$$-CH2$$
  $0$   $CH2$   $0$   $CH2$   $0$   $CH2$ 

CRN 26570-48-9 CMF (C2 H4 O)n C6 H6 O3

CC1 PMS

$$H_2 := CH - U - CH_2 - CH_2$$

CNI

CRN 3290-92-4 CMF C18 H26 06

CRN 106-91-2 CMF C7 H10 O3

CH2-0-C-C-Me

IC ICM B32B027-20

ICS G02B001-10; G02B005-23; G02C007-10

CC 38+3 (Plastics Fabrication and Uses) Section cross-reference(s): 42, 63

IT Lenses

(photochromic multilayer body and coating method for its production)

1T 521272-59-3P, Ebecryl 1830-NK Ester BPE 10-glycidyl.

methacrylate-NK Ester A 400-trimethylolpropane trimethacrylate

copolymer 757995-52-1P, NK Ester A 200-U 4HA copolymer

(photochromic coating, photochromic multilayer body and coating method for its production)

REFERENCE COUNT:

COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 4 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:779274 HCAPLUS Full-text

DOCUMENT NUMBER: 141:301505

TITLE: Manufacture of UV-absorbing plastic lenses

INVENIOR(S): Iryo, Takeaki

PATENT ASSIGNEE(S): Seiko Epson Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND	DATE	APPLICATION NO.	DATE
JP 2004264777 A	20040924	JP 2003-57507	20030304
PRIORITY APPLN INFO:		JP 2003-57507	20030304

ED Entered STN: 24 Sep 2004

The plastic lenses (e.g., eyeglass lenses for eye protection) are manufactured by photopolymn. of compns. containing monomers 100, UV absorbers 0.1-5, and visible light-absorbing photopolymn. initiators 0.0005-5 weight parts using a light source having spectral energy distribution in which energy is concentrated within 400-450 nm. Bisphenol A diglycidyl ether dimethacrylate 40, nonabutylene glycol dimethacrylate 20, benzyl methacrylate 25, a urethane dimethacrylate (prepared from isophorone diisocyanate and 2-hydroxypropyl methacrylate) 15, 2-(3,5-di-tert-butyl-2-hydroxyphenyl)-2H-benzotriazole (UV absorber) 1.0, tert-Bu peroxyisobutyrate (thermal polymerization initiator) 0.08, and tri-Et phosphite 0.2 g were stirred at room temperature, degassed, poured into a pair of molds, precured and cured by irradiation with a metal halide lamp, and annealed at 130° for 2 h to give lenses showing no defects or no peeling.

IT 357940-86-4P

CN

(manufacture of UV-absorbing plastic lenses by photopolymn, of monomer compns, containing UV absorbers and photopolymn, initiators with specific light sources)

RN 357940-86-4 HCAPLUS

2-Propenoic acid, 2-methyl-, (1-methylethylidene) bis [4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester, polymer with a-(2-methyl-1-oxo-2-propenyl)-a-[(2-methyl-1-oxo-2-propenyl)) apply (oxy-1,4-butanediyl), phenylmethyl 2-methyl-2-propenoate and 2-[[[[1,3,3-trimethyl-5-[[1-methyl-2-[(2-methyl-1-oxo-2-propenyl)]]]] oxylethoxylcarbonyl) aminolcyclohexyl methyl aminolcarbonyl] oxylpropyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 76701-94 5 CMF C26 H42 N2 O8

CM .

CRN 28883-57-0

CMF (C4 H8 O)n C8 H10 O3

CCI PMS

$$\begin{array}{c|c} \text{H2C} & \text{O} & \text{CH2} \\ \text{Me-C-C} & \text{C-(CH2)} & \text{4--} \\ \text{n} & \text{O-C-C-Me} \end{array}$$

CM 3

CRN 2495-37-6 CMF C11 H12 O2

H2C. 0 || || || |Me-C-C-O-CH2-Ph

CM 4

CRN 1565-94-2 CMF C29 H36 O8

C CH<sub>2</sub>

PAGE 1-B

IC ICM G02B003-00 ICS C08F002-01; C08F002-44; G02B001-04; G02C007-02

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 37, 38, 73

IT Eyeglass lanses
Light sources
Molding of plastics and rubbers
UV stabilizers

(manufacture of UV-absorbing plastic lenses by photopolymn: of monomer compns. containing UV absorbers and photopolymn. initiators with specific light sources)

TT 2495-37-6DP, Benzyl methacrylate, polymers with sulfur-containing urethane vinyl compds. and methacrylates 3634-83-1DP, m-Xylylene diisocyanate, reaction products with (vinylbenzylthio)ethanol, polymers with methacrylates 56361-55-8DP, 2,2-Bis(4-acryloyloxydiethoxyphenyl)propane, polymers with sulfur-containing urethane vinyl compds. and methacrylates 112503-98-7DP, polymers with sulfur-containing urethane vinyl compds. and methacrylates 129509-07-5DP, reaction products with xylylene diisocyanate, polymers with methacrylates 129509-08-6DP, reaction products with xylylene diisocyanate, polymers with methacrylates 357940-86-4P

(manufacture of UV-absorbing plastic lenses by photopolymn, of monomer compns, containing UV absorbers and photopolymn, initiators with

#### specific light sources)

ANSWER 5 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:651994 HCAPLUS Full-text

DOCUMENT NUMBER: 141:179709

Transparent optical materials having selective TITLE:

light absorption property, and manufacture thereof

INVENTOR(S): Torii, Toshihide; Fujio, Yoshiharu

PATENT ASSIGNEE(S): Hopnic Research Institute, Japan SOURCE:

Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO	•		DATE
JP 2004226913	A	20040812	JP 2003-17645		<del>-</del> .	20030127
JP 3843394	В2	20061108	<			
PRIORITY APPLN. INFO			JP 2003-17645			20030127

Entered STN: 13 Aug 2004 ED:

The invention relates to a transparent optical material having selective light absorption property suitable for use in ophthalmic lenses, etc., wherein the material consists of a copolymer obtained from a monomer mixture containing (1) (meth) acrylate rare earth metal salt 0.2-40, (2) hydroxyalkyl (meth) acrylate monoester with phthalic acid, hexahydrophthalic acid and/or alkanedicarboxylic acid 4-40, (3) polymerizable monomers 30-90 % A transparent plate was prepared from neodymium methacrylate 10, methacryloyloxyethyl phthalate 20; Me methacrylate 30, diethyleneglycol dimethacrylate 40 %.

735308-14-2P 735308-16-4P 735308-18-6P 735308-20-0P 735308-22-2P 735308-24-42 735308-27-7P 735308-29-9P 735315-25-0P

(transparent optical materials obtained from (meth) acrylate rare earth salt and other monomers)

735308-14-2 HCAPLUS

1,2-Benzenedicarboxylic acid, mono[2-[(2-methyl-1-oxo-2propenyl) oxylethyll ester, polymor with ethenylbenzene, (1-methylethylidene) bis (4,1-phenyleneoxy-2,1-ethanediyl) bis(2-methyl-2-propencate) and neodymium(3+) tris(2-methyl-2propenoate) (9CI) (CA INDEX NAME)

·CM

79718-22-2 CMF C4 H6 O2 . 1/3 Nd

-- CO2H

1/3 Nd(ITI)

CM :

CRN 27697-00-3 CMF C14 H14 O6

CM 3

CRN 24448-20-2 CMF C27 H32 O6

.CM 4

CRN 100-42-5 CMF C8 H8

 $A_{\mathbf{z}} \circ = \mathbf{z} \circ \mathbf{H} - \mathbf{F} \mathbf{h}$ 

9N 735308-16-4 HCAPLUS
CN 1.2 Benzenedicarboxylic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with exbium(3+)
 tris(2-methyl-2-propenoate), ethenylbenzene and (1-methylethylidene)bis(4,1-phenyleneoxy-2,1 ethanediyl)
 bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM J

CRN 79718-29-9 CMF C4 H6 O2 . 1/3 Er

@1/3 Er(III)

CM 2

CRN 27697-00-3 CMF C14 H14 O6

CM . 3

CRN 24448-20-2 CMF C27 H32 O6

CM 4

CRN 100-42-5

Hoc - CH-Ph'

PN 733308-18-6 HCAPLUS

1.2-Benzenedicarboxylic acid, mono[2 [(2 methyl-1-exe-2-propenyl)oxy]ethyl] ester, polymer with ethenylbenzene,

(1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl)

bis(2-methyl-2-propenoate) and presendymium(3+) tris(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CRN 79718-21-1

CMF C4 H6 O2 . 1/3 Pr

# 1/3 Pr(III)

CM 2

CRN 27697-00-3 CMF C14 H14 O6

CM 3

CRN 24448-20-2 CMF C27 H32 06

CM 4

CRN 100-42-5 CMF C8 H8

H2C==CH-Ph

RN. 735308-20-0 HCAPLUS

CN 1,2-Benzenedicarboxylic acid, mono[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl] ester, polymer with ethenylbenzene, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) bis(2-methyl-2-propenoate) and neodymium(3+) tris(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 79718-22-2 CMF C4 H6 O2 . 1/3 Nd

CH2 || Me\_ C\_ CO<sub>2</sub>H

CM 2

CRN 52848-10-9 CMF C15 H16 O6

CM ... 3.

CRN 24448-20-2 CMF C27 H32 C6

Cil

CRN 100-42-5

H2C == CH-Ph

### RN 735308-22-2 HCAPLUS

CN 1,2-Benzenedicarboxylic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with ethenylbenzene, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) bis(2-methyl-2-propenoate) and neodymium(3+) tri-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 36451-03-3 CMF C3 H4 O2 1/3 Nd

### @1/3 Nd(III)

CM 2

CRN 27697-00-3 CMF C14 H14 O6

CM 3

CRN 24448-20-2 CMF C27 H32 O5

$$H_2C$$
 0  $CH_2$   $CH_2$ 

CRN 100-42-5 CMF C8 H8

: H.2 C === CH -- Ph

RN 735308-24-4 HCAPLUS

CN 1,2-Benzenedicarboxylic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with erbium(3+) tris(2-methyl-2-propenoate), ethenylbenzene, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) bis(2-methyl-2-propenoate) and neodymium(3+) tris(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 79718-29-9 CMF C4 H6 O2 . 1/3 Er

CH2 || Me= C= CO2H

1/3. Er (III)

CM 2

CRN 79718-22-2 CMF C4 H6 O2 1/3 Nd

♠1/3 Nd(III)

CM 3

CRN 27697-00-3 CMF C14 H14 O6

CM. 4

CRN 24448-20-2 CMF C27 H32 O6

CM 5

CRN 100-42-5

Pylo 🚤 CP—Ph

RN 735308-27-7 HCAPLUS.

EN Butanedioic acid, mono[2-[(2-methyl-1-exo-2-propenyl)oxy]ethyl] ester, polymer with ethenylbenzene, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) bis(2-methyl-2-propenoate) and neodymium(3+) tris(2-methyl-2-propenoate) (9CI) (CF INDEX NAME)

CM 1

CRN 79718-22-2 CMF C4 H6 O2 . 1/3 Nd

1/3 Nd(III).

CRN 24448-20-2 CMF C27 H32 O6

CM J

CRN 20882-04-6 CMF C10 H14 O6

CM 4

CRN 100-42-5 CMF CB H8

H.2 C. \_\_\_ CH \_ Ph

RN 735308-29-9 HCAPLUS

CN Butanedioic acid, mono[2-[(1-oxo-2-propenyl)oxy]ethyl] ester, polymer with ethenylbenzene, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) bis(2-methyl-2-propenoate) and neodymium(3+) tris(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM

CRN 79718-22-2 CMF C4 H6 02 1/3 Nd

●1/3. Nd(III)

CM 2

CRN 50940-49-3 CMF C9 H12 O6

CM .

CRN 24448-20-2 CMF C27 H32 O6

$$\begin{array}{c} \text{H2C} \\ \text{Me} = \text{C} = \text{C} + \text{O} = \text{CH}_2 + \text{C} + \text{O} = \text{C} + \text{C} + \text{O} = \text{C} + \text{C$$

CM .

CRN 100-42-5 CMF C8 H8

Hacemar Cii — Pir

RN 735015 25-0 HCAPLUS

CN 1,2 Cyclohexaned:carboxylic acid, methyl-, monoester with 1,2 propanedio1 mono(2-methyl-2-propenoate), polymer with ethonylbenzene, (1 methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) bis(2-methyl-2-propenoate) and neodymium(3+) tris(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM I

CRN 79718-22-2

CMF C4 H6 O2 . 1/3 Nd

### ●1/3 Nd(III)

CM :

. CRN 24448-20-2 CMF C27 H32 O6

CM.

CRN 100-42-5 CMF C8 H8

CMF CO HO

H2C== CH-Ph ...

.CM

CPM 735315-24-9

CMF: 616 H24 O6 -

CCI IDS

ČM 5

CRN 82476-50-4 CMF C9 H14 04

CCT IDS

D1-Me

79-41-4 CRN C4 H6 02 CMF

- С— СО2 Н

ĊM

CRN 57-55-6 CMF C3 H8 O2

OH: H3C-CH-CH2-ОН

IC | ICM | G02B005-22 | 11 44 4

ICS C08F002-02; C08F220 12; G02B001-04

63-7 (Pharmaceuticals)

Section cross-reference(s): 38

IT: Eyeglass lenses

Human

Lenses

Medical goods

Optical materials

(transparent optical materials obtained from (meth) acrylate rare

earth salt and other monomers)

735308-10-8P 735308-12-0P 735308-14-2P IT 735308-16-40 735308-18-59 735308-20-0P-

735308-22-2P 735308-24-4P 735308-27-7P

735308-29-9P 735315 25-0P

(transparent optical materials obtained from (meth)acrylate rare earth salt and other monomers,

L24 ANSWER 6 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN 2004:493798 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 141:59776

Coating composition and optical article TITLE:

Mori, Katsuhiro, Momoda, Junji INVENTOR(S):

### 10/549.696

PATENT ASSIGNEE(S):

Tokuyama Corporation, Japan

SOURCE:

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LANGUAGE:

FAMILY ACC. NUM. COUNT:

Japanese

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WO 2004050775	A1	20040617	WO 2003-JP15558	20031204

W: AU, JP, US.

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU,

IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR

AU 2003288992 · · A1 20040623 AU 2003-288992 20031204

EP 1568739 20050831 EP 2003-778751 20031204

AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,

PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK US 2006071203 A1 20060406 US 2005-529462 20050328.

PRIORITY APPLN. INFO.

JP 2002-354291. 20021205

JP 2002-372835

WO 2003-JP15558

. . - - -

20021224

200312049

ED Entered STN: 18 Jun 2004

Disclosed is a coating composition which, when applied to a substrate such as a plastic lens, can form on the substrate surface a photochromic coating layer naving satisfactory photochromism and excellent adhesion to the substrate. The composition contains as monomer ingredients, for example, 0.1-20 % monomer having a group which generates a silanol group upon hydrolysis, such as ymethacryloyloxypropyltrimethoxy silane and 0.1-50 % monomer having at least one oxycarbonyl group per mol. A maleimide compound may be further contained as other monomer ingredient. More desirably, the composition contains an amine compound A coating composition containing ymethacryloyloxypropyltrimethoxysilane, trimethylolpropanetrimethacrylate, polyethylene glycol diacrylate Jurethane oligomer hexaacrylate (U-6HA), glycidyl methacrylate, hydroxypivalic acid neopentylglycol diacrylate, Nmethyldiehtanolamine, a polymerization initiator, a stabilizer, and a chromone compound, was formulated, and applied on a thiourethane-based plastic lense,

705968-00-9P-705968-01-0P-705963-02-1P-

705968-03-29-705968-04-39-705968-05-4P

705968-06-5P 705968-07-6P 705968-08-7P

705958-09-8P 705968-10-1P M05968-11-2P

705968-12-3P 705963-13-4P 705968 44-590

705968-17-8P 705968-18-9P 705958-19-0P

705968-20-3P 705968-21-4P 705968-32-79

(photochromic coating composition for optical article)

705968-00-9 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 3-[2,2-dimethyl-1-oxo-3-[(1-oxo-2-propenyl)oxy]propoxy]-2,2dimethylpropyl 2-propencate,  $\alpha,\alpha'$ -{(1-methylethylidene)di-4,1-phenylene] bis  $[\omega - [(1-\infty x)-2-propenyl)]$  oxy] poly  $(\infty x)-1,2-$ 

ethanediyl)], oxiranylmethyl 2-methyl-2-propenoate,

-PAGE 1-B

 $\alpha$ -(1-oxo-2-propenyl)- $\omega$ -[(1-oxo-2-propenyl)oxylpoly(oxy-1,2-ethanediyl) and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA\_INDEX\_NAME)

CM :

CRN 64401-02-1

CMF (C2 H4 O)n (C2 H4 O)n C21 H20 O4

CCI PMS

$$H_2C = CH - \begin{pmatrix} 0 & CH_2 - CH_$$

$$-CH_2 - - CH_2 - CH_2$$

.CM · · · 2

CRN 30145-51-8 CHE C16 H24 O6

. CM: - 31 -

CRN 26570-48-9

CMF (C2 H4 O)n C6 H6 O3

CCI PMS ...

CRN 3290-92-4 CMF C18 H26 O6

CM 5

CRN 2530-85-0 CMF C10 H20 05 Si

CM 6

CHF C7 H10 03

RN 705968-01-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-exo-2-propenyl) oxy]methyl]-1,3-propanediyl ester, polymer with 3-[2,2-dimethyl-1-oxo-3-[(1-oxo-2-propenyl) oxy]propoxy]-2,2-dimethylpropyl 2-propenoate, Ebecryl 1830, a,a'-+(i methylethylidene)di-4,1-phenylene]bis(a-f(1-oxo-2-propenyl) oxy]poly(oxy-1,2-ethanediyl)], oxiranylmethyl 2-methyl-2-propenoate, a-(1-oxo-2-propenyl) -a-[(1-oxo-2-propenyl) oxy]poly(oxy-1,2-ethanediyl) and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

PAGE 1.-B

CM 1

CRN 146479-65-4 CMF Unspecified CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 64401-02-1

CMF (C2 H4 O)n (C2 H4 O)n C21 H20 O4

CCI. PMS

 $H_2C = CH - CH_2 - CH_2 - CH_2 - O$  Me Me Me

 $-CH_2 - \frac{0}{n}O - C - CH - CH_2$ 

CM 3

CRN 30145-51-8 CMF C16 H24 O6

 $\frac{0}{152}$ C == Cii = C = O = CH<sub>2</sub> = CH<sub>2</sub> = O = CH<sub>2</sub> = CH<sub></sub>

" CM 1 4

CPN 26570-48-9

CMF (C2 H4 O)n C6 H6 O3

CCI PMS .

$$H_2C = CH - C - CH_2 - CH_2$$

CRN 3290-92-4 CMF C18 H26 O6

CM 6

CRN 2530-85-0 CMF C10 H20 O5 Si

CM . 7

CRN 106 91-2 CMF C7 H10 03

RN 705968-02-1 HCAPLUS

CN 2-Properbic acid, 2-methyl-, (1-methylethylidene) bis (4,1-phenyleneoxy-2,1-ethanediyl) ester, polymer with 3-[2,2-dimethyl-1-oxo-3-[(1-oxo-2-propenyl) oxy] propoxyl-2,2-dimethylpropyl 2-propenoate, Ebecryl 1830, 2,2'-(methylimino) bis [ethanol], a-(2-methyl-1-oxo-2-propenyl) = p-methoxypoly(oxy-1,2-ethanediyl), oxiranylmethyl

2-methyl-2-propenoate and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 146479-65-4 CMF Unspecified CCI PMS, MAN

### \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 30145-51-8 CMF C16 H24 O6

$$H_2C = CH - C - O - CH_2 - C - CH_2 - O - CH_2 - O - CH_2 - CH_2 - O - CH_2 - O - CH_2 - O - CH_2 - O - CH_2 - CH_2 - O - CH_2 - CH_2$$

ĆM , " 3

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

CCI PMS

CM 4

CRN 24448-20-2 CMF C27 H32 O6

CM 5

H2C O OME 
$$Me-C-C-O-(CH_2)3-Si-OMe$$
 OME

CM : 6

CRN 106-91-2 CMF C7 H10 O3

CM 7

CRN 105-59-9 CMF C5 H13 N O2

RN 705968-03-2 HCAPLUS

CN 2-Propencic acid, 2-methyl-, oxiranylmethyl ester, polymer with 3-[2,2-dimethyl-1-cxo-3-[(1-oxo-2-propenyl)oxy]propoxy]-2,2-dimethylpropyl 2-propencate, Effectyl 1830, α-hydro-ω-[(1-oxo-2-propenyl)oxy]poly[oxy(1-oxo-1,6 hexanediyl)],

α, α'-{(1-methylethylidene) di-4,1-phenylene|bis[α-[(1-

oxo-2-propenyl)oxylpoly(oxy-1,10ethadediyl)], 2,2'-

(methylimino) bis [ethanol], NK Oligo U 6HA, α-(1-oxo-2-propenyl)

 $\omega$ -[(1-oxo-2-propenyl)exy]poly(oxy 1.2-ethanediyl) and

3-(trimethoxysilyl)propyl 2-methyl-2-propendate (9CI) (CA. INDEX NAME)

CM 1

CRN 146479-65-4 CMF Unspecified CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 116958-66-8 CMF Unspecified CCI PMS, MAN

# \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 3

CRN 97387-29-6

CMF (C6 H10 O2) n C3 H4 O2

CCI PMS

$$H = \begin{bmatrix} 0 & 0 & C & CH_2 \\ 0 & C & CH_2 \end{bmatrix} = \begin{bmatrix} 0 & 0 & C \\ 0 & C & CH_2 \end{bmatrix} = CH_2$$

CM 4

CRN 64401-02-1

CMF (C2 H4 O)n (C2 H4 O)n C21 H20 O4

CCI PMS

PAGE 1+A

$$H_2C = CH - CH_2 - CH$$

The state of the s

CM: 5

CRM 30145-51-8 CMF C16 H24 O6

CRN 26570-48-9

CMF (C2 H4 O)n C6 H6 O3

CCI PMS

CM:

CRN 2530-85-0

CMF . C10 H20 O5 Si

$$H2C$$
 O OMe Me  $C_1$   $C_2$   $C_3$   $C_4$   $C_4$   $C_5$   $C_6$   $C_4$   $C_5$   $C_6$   $C$ 

i M

CRN 106-91-2

CMF C7 H10 O3

CM 3 19 14 4

CRN 105-59-9 CMF C5 H13 N O2

705968-04-3 HCAPLUS RN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-CN propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, α-hydro-ω-[(1-oxo-2-propenyl)oxy]poly[oxy(1-oxo-1,6-hexanediyl)], (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) bis (2-methyl-2-propencate),  $\alpha, \alpha'$ -[(1-methylethylidene)di-4,1-phenylene]bis[ $\omega$ -[(1-exo-2-propenyl)exy]poly(exy-1,2ethanediyl)], NK Oligo U 6HA, oxiranylmethyl 2-methyl-2-propenoate and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME) CM: CRN 116958-66-8 CMF ' Unspecified. CCI PMS, MAN STRUCTURE DIAGRAM IS NOT AVAILABLE CM ... CRN 97387-29-6 CMF (C6 H10 O2) n C3 H4 O2 CCI PMS

$$H = \begin{bmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \end{bmatrix}$$
  $0 + C + CH = CH_2$ 

CRN 64401-02-1 CMF (C2 H4 O)n (C2 H4 O)n C21 H20 C4-CC1 PMS

$$H_2C = CH = CH_2 - CH$$

$$-CH_2$$
  $0$   $CH_2$   $CH_2$   $CH_3$ 

CRN 24448-20-2 CMF C27 H32 O6

CM :

CRN 3290-92-4 CMF C18 H26 06

CM 6

CRN 2867-47-2 CMF C8 H15 N 02

CM :

CRN 2530 85-0 CMF C10 H20 O5 Si

CRN 106-91-2 CMF C7 H10 O3

RN 705968-05-4 HCAPLUS
CN Butanedioic acid, mone[2-[(1-oxo-2-propenyl)oxy]ethyl] ester, polymer with 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3- propanediyl bis(2-methyl-2-propenoate), α,α'-[(1-methylethylidene)di-4,1-phenylene]bis[ω-[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)], 2,2'- (methylimino)bis[ethanol] oxiranylmethyl 2-methyl-2-propenoate. α-(1-oxo-2-propenyl)-ω-[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9Cl) (CA INDEX NAME)

CM I

CRN 64401-02-1 CMF (C2 H4 O)n (C2 H4 O)n C21 H20 O4 CCI PMS

PAGE 1-B

CRN 50940-49-3 CMF C9 H12 O6

$$H_2C = CH = U - O - CH_2 - CH_2 - O - U - CH_2 - CH_2 - CO_2H$$

CM 3

CRN 26570-48-9

CMF (C2 H4 O)n C6 H6 O3

CCI PMS

$$CH_2C = CH - C - CH_2 - CH_2$$

CM 4

CRN 3290-92-4 CMF C18 H26 O6

CM 5

CRN 2530-85-0 ... CMF C10 H20 O5 Si

CRN 106-91-2 CMF C7 H10 O3

O CH2 CH2-O-C-C-Me

CM 7

CRN 105-59-9 CMF C5 H13 N O2

ме но— си<sub>2</sub>— си<sub>2</sub>— n— си<sub>2</sub> — си<sub>2</sub>— он

RN 705968-06-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 3-(dimethoxymethylsilyl)propyl 2-methyl-2-propenoate, Ebecryl 1701, (1-methylethylidene)bis(4,1-phenyleneoxy-2/1-ethanediyl) bis(2-methyl-2-propenoate), 2,2-(methylimino)bis[ethanol], NK Oligo U 6HA and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 135990-90-8 CMF Unspecified CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 116958-66-8 CMF Unspecified CCI PMS: MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM.

CRN 24448-20-2 CMF C27 H32 O6

См 4

CRN 14513-34-9 CMF C10 H20 O4 Si

CM 5

CRN 3290-92-4 CMF C18 H26 O6

CM 6

CRN 1,06-91-2 CMF C7 H10 03

CM

CRN 105-59-9

CMF C5 H13 N O2

ме но— сн<sub>2</sub>— сн<sub>2</sub>— N— сн<sub>2</sub>— сн<sub>2</sub>— он

RN 705968-07-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, Ebecryl 1701, Ebecryl 1830, α,α'-[(1-methylethylidene)di-4,1-phenylene]bis[ω-[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)], oxiranylmethyl 2-methyl-2-propenoate, α-(1-oxo-2-propenyl)-ω-[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 146479-65-4 CMF Unspecified CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2.

CRN 135990-90-8 CMF Unspecified CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM : 3

-- CRN + 64401-02-1

CMF (C2 H4 O)n (C2 H4 O)n C21 H20 O4

CCI PMS

PAGE 1-A
$$H_2C = CH = C + CH_2 + CH_$$

CRN 26570-48-9

CMF (C2 H4 O)n C6 H6 O3

CCI PMS

$$H_2C = CH - C - CH_2 - CH_2$$

CM !

CRN 3290-92-4

CMF C18 H26 O6

CM 6

CRN 2867-47-2

CMF C8 H15 N 02

CM . 7. .

CRN 2530-8540

CMF C10 H20 O5 Si

CM . 8

CRN 106-91-2 CMF C7 H10 O3

RN 705968-08-7 HCAPLUS

CM 1

CRN 93294-97-4 CMF C64 H94 O25

CRN 66753-64-8 CMF C10 H20 O3 Si

CM 3

CRN. 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

CCI PMS

Civi 4

CRN 24448-20-2 CMF C27 H32 O6

CRN 3290-92-4 CMF C18 H26 O6

CM 6

CRN 106-91-2 . CMF / C7 H10 03

CM 7

CRN 105-59-9 CMF C5 H13 N O2

RN 705968-09-8 HCAPLUS
CN 3-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanedlyl ester, polymer with
1,1'-(methylenedi-4,1-phenylene)bis[1H-pyrrole-2,5-dione],
c,c'-[(1 methylethylidene)di-4,1 phenylonelbis[ω-{(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethlenediyl)], 2,2'(methylimino)bis[ethanol], NK Oligo U SHA oxiranylmethyl
2-methyl-2-propenoate and α-(1-oxo-2-propenyl)-ω-[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethlenediyl) (9UT) (CA INDEX NAME)

CM 1

CRN 116958-66-8 CMF Unspecified CCT PMS, MAN

#### \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 64401-02-1

CMF (C2 H4 O)n (C2 H4 O)n C21 H20 O4

CCI PMS

PAGE: 1-B

$$-CH_2 - \int_{\mathbf{n}} O - C - CH = CH_2$$

CM 3

CRN 26570-48-9

CMF (C2 H4 O)n C6 H6 O3

CCT PMS:

$$H_2C = CH - CH_2 - CH$$

CM 4

CRN 13675-54-5

CMF C21 H14 N2. 04

CRN 3290-92-4 CMF C18 H26 O6

.CM (

CRN 106-91-2 CMF C7 H10 O3

CM 7

CRN 105.59-9 CMF 05.H13 N 02

RM 705968-10-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl) cxy] methyl]-1,3-propanediyl ester, polymer with 1,1'- (methylenedi-4,1-phenylene) bis[1H-pyrrole-2,5-dione], a,a'-[(1-methylethylidene) di-4,1-phenylene] bis[w-[(1-oxo-2-propenyl) oxy] poly(oxy-1,2-ethanediyl)], EK Olido 0 69A, oxiranylmethyl 2-methyl-2-propenoate and a-(T-oxo-2-propenyl)-w-[(1-oxo-2-propenyl) oxy] poly(oxy-1,2-ethanediyl) (9CT) (CA INDEX NAME)

CM I

CRN 116958-66-8 CMF Unspecified CCI PMS, MAN

# \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 64401-02-1 :

CMF (C2 H4 O)n (C2 H4 O)n C21 H20 O4

CCI PMS

$$H_2C = CH - CH_2 - CH$$

CM . . . 3

CRN 26570-48-9

CMF (C2 H4 O) n C6 H6 O3

CCI FMS

$$H_2C = CH - CH_2 - CH$$

CM 4

CRN 13676-54-5 CMF C21-F14 N2 04

#### RN 705968-11-2 HCAPLUS

2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) ester, polymer with 1,1'-(methylenedi-4,1-phenylene)bis[1H-pyrrole-2,5-dione], 2,2'-(methylimino)bis[ethanel], \alpha-(2-methyl-1-oxo-2-propenyl)-\alpha-methoxypoly(oxy-1,2-ethanediyl), NK Oligo U 6HA and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

#### CM .

CN

CRN 116958 66-8 CMF Unspecified CCI PMS, MAN

# \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

#### CM :

CRN 26915-72-0. CMF (C2 H4 O)n C5 H8. O2. CCI PMS

CRN 24448-20-2 CMF C27 H32 O6

CM 4

CRN 13676-54-5 CMF C21 H14 N2 O4

CM 5

CRN 106-91-2 CMF C7 H10 O3

::CM. (

CRN 105-59-9 CMF C5 H13 N O2

R.N 705968-12-3 HCAPLUS 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with CN 1,1'-(methylenedi-4,1-phenylene)bis[1H-pyrrole-2,5-dione],  $\alpha, \alpha'$  - [(1-methylethylidene)di-4,1-phenylene]bis[ $\omega$ -[(1oxo-2-propenyl)oxylpoly(oxy-1,2-ethanediyl)], 2,2'-(methylimino)bis[ethanol], NK Oligo U 6HA,  $\alpha$ -(1-oxo-2-propenyl)- $\omega$ -[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME) CM CRN: 116958-66-8 Unspecified CMF CCI PMS, MAN STRUCTURE DIAGRAM IS NOT AVAILABLE CI4 CRN 64401-02-1 CMF: (C2 H4 O)n (C2 H4 O)n C21 H20 O4 CCI PMS

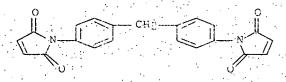
$$H_2C = CH - CH_2 - CH$$

PAGE i - B  $CH_2 \longrightarrow \frac{1}{n} \circ CH \longrightarrow CH \longrightarrow CH_2$ 

CPN 26570-48-9 CMF (CZ H4 O)n C6 H6 O3 CCI PMS

$$H_2C = CH - C - CH_2 - CH_2$$

CRN 13676-54-5 CMF C21 H14 N2 O4



· CM

CRN 2530-85-0 CMF C10 H20 O5 Si

CM 6

CRN 106-91-2 CMF C7 H10 03

Ciri

CRN 105-59-9 CMF C5 H13 N O2

705968-13-4 HCAPLUS RN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-CN propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 3-[2,2-dimethyl-1-oxo-3-[(1-oxo-2-propenyl)oxy|propoxyl-2,2-dimethylpropyl 2-propenoate, Ebecryl 1830, 1,1'-(methylenedi-4,1-phenylene)bis[1H-pyrrole-2,5dione],  $\alpha, \alpha' - [(1-methylethylidene)di-4, 1$ phenylene] bis  $[\omega - ((1-\infty x)^2 - propenyl)]$  oxy] poly (0xy-1, 2ethanediyl)]; cxiranylmethyl 2-methyl-2-propenoate,  $\alpha$ -(1-oxo-2-propenyl)- $\omega$ -[(1-oxo-2-propenyl)oxy]poly(oxy-1,2ethanediyl) and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME) CM CRN 146479-65-4 CMF Unspecified CCI PMS, MAN' STRUCTURE DIAGRAM IS NOT AVAILABLE \*

CRN 64401-02-1

CMF (C2 H4 O)n (C2 H4 O)n C21 H20 O4.

CCI. PMS.

PAGE 1-A

H2C = CH = 7 - CH2 - CH2 - O | Me | C - CH2 - O | Me | Me

norman de la Medicina esta de la comercia de la Medicina de la Medicina de Maria de Maria de la Primeira de la Como de la comercia de la Companya d

CM

CRN 30145-51-8,

CMF C16 H24 O6

CM 4

CRN 26570-48-9 CMF (C2 H4 O)n C6 H6 O3 CCI PMS

$$H_2C = CH - CH_2 - CH$$

CM 5

CRN 13676-54-5 CMF C21 H14 N2 O4

CM 6

CRN 3290-92-4 CMF C18 H26 06

CRN 2867-47-2 CMF C8 H15 N O2.

CM 8

CRN 2530-85-0 CMF C10 H20 O5 Si

CM 9

CRN 106-91-2 CMF C7 H10 O3

RN 705968-14-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl) oxy]methyl]-1,3-propanediyl ester, polymer with
3-[2,2-dimethyl-1-oxo-3-[(1-oxo-2-propenyl) oxy]propoxy]-2,2-dimethylpropyl 2-propenoate, 1,1!-[(1-methylethylidene)bis(4,1-phenyleneoxy-4,1-phenylene)]bis[1H-pyrrole-2,5-dione],
α,α'-[(1-methylethylidene)di-4,1-phenylene]bis[ω-[(1-oxo-2-propenyl) oxy]poly(oxy-1,2-ethanediyl)], 2,2'-(methylimine)bis[ethanol], NK Oligo U 6HA, oxiranylmethyl
2-methyl-2-propenoate, α-(1-oxo-2-propenyl)-ω-[(1-oxo-2-propenyl) oxy]poly(oxy-1,2-ethanediyl) and 3-(trimethoxysily)-propyl
2-methyl-2-propenoate (9Cl) (CA INDEX NAME)

CM :

CRN 116958-66-8 CMF Unspecified CCI PMS, MAN

#### \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM: 2

CRN 79922-55-7 CMF C35 H26 N2 O6

CM . . . 3

CRN 64401-02-1

CMF (C2 H4 O)n (C2 H4 O)n C21 H20 O4

CCI PMS .

$$H_2C = CH - CH_2 - CH$$

CM . 4

CRN 30145-51-8 CMF C16 H24 O6

CRN 26570-48-9

CMF (C2 H4 O)n C6 H6 O3

CCI PMS

$$H_2C = CH - C - CH_2 - CH_2$$

ĊM 6

CRN 3290-92-4

CMF C18 H26 O6

CM 7

CRN 2530-85-0 CMF C10 H20 05 Si

CM 8

CRN 106-91-2 CMF C7 H10 O3

CRN 105-59-9 CMF C5 H13 N O2

ме но- cн<sub>2</sub>- cн<sub>2</sub>- N- cн<sub>2</sub>- cн<sub>2</sub>- он

RN. 705968-17-8 ECAPLUS
CN Hexanoic acid, 6-{(1-exo-3-propenyl) oxy]-, 2-[[3-{[1-exo-6-](1-exo-2-propenyl) oxy] hexyl] oxy]-2,2-bis[[[1-exo-6-[(1-exo-2-propenyl) oxy] hexyl] oxy] methyl] propoxy] methyl]-2-[[[1-exo-6-[(1-exo-2-propenyl) oxy] hexyl] oxy] methyl]-1,3-propanediyl ester, polymer with 2-ethyl-2-[[(2-methyl-1-exo-2-propenyl) oxy] methyl]-1,3-propanediyl bis(2-methyl-2-propenoate), 1,1'-(methylenedi-4,1-phenylene) bis[1H-pyrrole-2,5-dione], α,α'-[(1-methylethylidene) di-4,1-phenylene] bis[ω-[(1-exo-2-propenyl) exy] poly(exy-1,2-ethanediyl)], 2,2'-(methylimino) bis[ethanol], exiranylmethyl 2-methyl-2-propencate, α-(1-exo-2-propenyl)-ω-[(1-exo-2-propenyl) exy] poly(exy-1,2-ethanediyl) and 3-(trimethoxysilyl) propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM :

CRN 93294/97-4 CMF C64 H94 025

$$\begin{array}{c} \text{PAGE 1-A} \\ \text{H}_2\text{C} = \text{C}^p - \text{C} - \text{O} - (\text{CH}_2) \text{ 5} - \text{C} - \text{CH}_2 \\ \text{O} \\ \text{H}_2\text{C} = \text{CH} - \text{C} - \text{O} - (\text{CH}_2) \text{ 5} - \text{C} - \text{O} - \text{CH}_2 - \text{C} + \text$$

PAGE 1-B

PAGE 1-B

$$- (CH2) 5 - Q - CH - CH2$$

$$- (CH2) 5 - Q - CH - CH2$$

$$- (CH2) 5 - Q - CH - CH2$$

$$- (CH2) 5 - Q - CH - CH2$$

CM 2

CRN 64401-02-1 CMF (C2 H4 O)n (C2 H4 O)n C21 H20 O4

CCI PMS

$$-cH_2 - \int_{n}^{0} -cH_2 = cH_2$$

CRN 26570-48-9

CMF (C2 H4 O) i C6 H6 O3

CCI PMS

$$H_2C = CH = CH_2 - CH_2 - CH_2 = CH_2$$

CRN 13676-54-5 CMF C21 H14 N2 O4

$$CH_2$$

CM

CRN 3290-92-4 CMF C18 H26 O6

CM 6

CRN 2530-85-0

CMF C10 H20 O5 Si

CM 7

CRN 106-91-2 CMF C7 H10 C3

CM.

105-59-9 CRN · CMF C5 H13 N O2

но- сн2- сн2- N- сн2- сн2- он

RN 705968-18-9 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer ĆN. with 3-[2,2-dimethyl 1-oxc-3-[(1-oxo-2-propenyl)oxy]propoxy]-2,2dimethylpropyl 2-propenoate, Ebecryl 1830, 1,1'-(methylenedi-4,1phenylene) bis [1H-pyrrole-2,5-dione],  $\alpha,\alpha'$ -[(1methylethylidene) di-4,1-phenylene] bis[m-[(1-oxo-2propenyl)oxy]poly(oxy-1,2-ethanediyl)], NK Oligo U 6HA; oxiranylmethyl 2-methyl-2-propenoate,  $\alpha = (1-\infty x^2 - 2 + propenyl) - \omega = [(1-\infty x^2 - 2 + propenyl)]$ propenyl)oxy]poly(oxy-1,2-ethanediyl) and 3-(trimethoxysilyl)propyl 2-methy1-2-propenoate (9CI) (CA INDEX NAME)

CM.

CRN 146479-65-4 CMF Unspecified CCI PMS, MAN

STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM

CRN 116958-66-8. CMF Unspecified CCI PMS, MAN

STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM

64401-02-1

(C2 H4 O) n (C2 H4 O) n C21 H20 O4 CMF.

CCI PMS

PAGE 1-A

$$-CH_2$$
  $0$   $C-CH$   $CH_2$ 

CRN 30145-51-8 CMF .C16 H24 O6

CM 5

CRN 26570-48-9

CMF (C2 H4 O)n C6 H6 O3

$$H_2C = CH - C - CH_2 - CH_2$$

CRN 13676-54-5 CMF - C21 H14 N2 O4

CM.

CRN. 2867-47-2 CMF. C8 H15 N O2

CRN 2530-85-0 CMF C10 H20 O5 Si

CM

CRN 106-91-2 CMF C7 H10 03

RM 705960-19-0 HCAPLUS

IN 2-eropenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 3-(dimethoxymethylsilyl)propyl 2-methyl-2-propenoate, Ebecryl 1701, 1,1'-(methylenedi-4,1-phenylene)bis[1H-pyrtole-2,5-dione], (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) bis(2-methyl-2-propenoate), 2,2'-(methylimino)bis[ethanol], NK Oligo U 6HA and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM I

CMF Unspecified CCI PMS, MAN

#### \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

Cīvi 2

CRN 116958-66-8 CMF Unspecified CCI PMS, MAN

### \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 3

CRN 24448-20-2 CMF C27 H32 O6

$$H_2C$$
 O  $CH_2$   $CH_2 - CH_2 - CH_2$ 

CM 4

CRN 14513-34-9 CMF C10 H20 O4 Si

$$HZC U OMe Me - C - C - O - (CH2)3 - Si - Me OMe$$

CM

CRN 13676-54-5 CMF C21 H14 N2 O4

CM 6

CRN 3290-92-4 CMT C10 H26 O6

CRN 106-91-2 CMF C7 H10 O3

CM 8

CRN 105-59-9 CMF C5 H13 N O2

RN 705968-20-3 HCAPLUS

CN 2-Propenoid acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-T-oxo-2 propenyl)exy]methyl]-1,3-propanediyl ester, polymer with
2-(dimethylamino)ethyl 2-methyl-2-propenoate, Ebecryl 1701, Ebecryl
1830, 1,1-(methylenedi-4,1-phenylene)bis[IH-pyrrole-2,5-dione],
 (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl)
 bis(2-methyl-2-propenoate), α-(2-methyl-1-oxo-2-propenyl) ω-methoxypoly(oxy-1,2-ethanediyl), oxiranylmethyl
2-methyl-2-propenoate and 3-(trimethoxysilyl)propyl
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRM 116419 05-1 CMF Unspecified CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM - 2

CRN 135990-90-8 CMF Unspecified CCI PMS, MAN

# \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

. CM 3

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

CCI PMS

CM · 4

CRN 24446-20-2 CMF C27 H32 O6

CM S

CRN 13676-54-5 CMF C21 H14 N2 04

CM 6

CRN 3200:92 4 CMF C18 H26 OF

CRN 2867-47-2 CMF C8 H15 N G2

CM 8

CRN 2530-85-0 CMF C10 H20 OS Si

CM 9

CRN 106-91-2 CMF C7 H10 O3

RN 705968-21-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 3-(dimethoxymethylsilyl)propyl 2-methyl-2-propencate, 3-[2,2-dimethyl-1-oxo-3-[(1-oxo-2-propenyl)oxy]propxy]-2,2-dimethylpropyl 2-propencate, Ebecryl 1830, 1,1' (methylenedi-4,1 phenylene)bis[1H-pyrrole 2,5-dione], \alpha,\alpha'-[(1-oxo-2-methyl-1-oxo-2-methylene]bis[\omega-[(1-oxo-2-methyl-1-oxo-2-methyl-1-oxo-2-methylene]bis[\omega-[(1-oxo-2-methyl-1-ox

#### 10/549.696

propenyl)oxy]poly(oxy-1,2-ethanediyl)], 2,2'- (methylimino)bis[ethanol], oxiranylmethyl 2-methyl-2-propenoate and  $\alpha$ -(1-oxo-2-propenyl)- $\omega$ -[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 146479-65-4 CMF Unspecified CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 64401-02-1

CMF (C2 H4 O)n (C2 H4 O)n C21 H20 O4

CCI PMS

PAGE 1-A
$$H_2C = CH - U - O - CH_2 - CH_2 - O$$

$$Me$$

$$Me$$

PAGE 1-B

$$-CH_2 - CH_2 - CH_2 - CH_3 - CH_2$$

CM 3.

CRN 30145-51-8 CMF C16 H24 O6

CM 4

CRN 26570-48-9

CMF (C2 H4 O)n C6 H6 O3 CCI PMS

$$H_2C = CH - CH_2 - CH$$

CM 5

CRN 14513-34-9 CMF C10 H20 O4 Si

$$H2C = 0$$
 OMe  $Me = C = C = 0 - (CH2)3 - Si = Me$  OMe

CM 6

CRN 13676=54-5 CMF C21 H14 N2 Q4

CM.

CRN 3230-92-4 CMF C18 H26 O6

CRN 106-91-2 CMF C7 H10 O3

.CM 9

CRN 105-59-9 CMF C5 H13 N O2

ме но— сн<sub>2</sub>— сн<sub>2</sub>— кн<sub>2</sub>— он

RN 7.05968-32-7 HCAPLUS

N 1,2-Cyclohexanedicarboxylic acid, mono[2-[(1-oxo-2-propenyl)oxy]ethyl]
 ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propengate,
 3-[2,2-dimethyl-1-oxo-3-[(1-oxo-2-propenyl)oxy]propoxy]-2,2 dimethylpropyl 2-propengate, α,α'-[(1-methylethylidene)di4,1-phenylene]bis[ω-[(1-oxo-2-propenyl)oxy]poly(oxy-1,2 ethanediyl)], NK Cligo U GNA, oxiranylmethyl 2-methyl-2-propengate,
 α-(1-oxo-2-propenyl)-ω-[(1-oxo-2-propenyl)oxy]poly(oxy-1,2 ethanediyl) and 3-(trimethoxysilyl)propyl 2-methyl-2-propengate (9CI)
 (CA INDEX NAME)

CM:

CRN 115958 66 8 CMF Unspecified CCI PMS MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

, ,CM- . . . 2

FCRN 64401-02-1

CMF (C2 H4 O)n (C2 H4 O)n C21 H20 O4

CCI PMS

PAGE 1-A

$$H_2C = CH = CH_2 - CH$$

$$-CH_2 - \frac{0}{n}O - CH - CH_2$$

CM 3...

CRN 57043-35-3 CMF C13 H18 06

CM: 4

CRN 30145-51-6 CMF C16-H24 O6

$$\begin{array}{c} 0 & \text{Me} \\ \text{H}_2 \text{C} = \text{CH}_2 - \text{C} + \text{CH}_2 - \text{C} + \text{C}$$

CM 5

CRN 26570-48-9 CMF (C2 H4 O)n (C2 H4 O) n C6 H6 O3

CCI

$$H_2C = CH - C = CH_2 - CH_2 - CH_2 = CH_2 = CH_2$$

CRN 2867-47-2 CMF C8 H15 N O2

CM 7

CRN 2530-85-0 CMF C10 H20 O5 Si

$$H2C$$
 O OME  $Me = C - C - O - (CH2)3 - Si - OMe$  OME

CM 8

CRN 106-91-2 CMF C7 H10 C3

- IC ICM C09D004-00
  - ICS | C09D007-12; | C09K009-02; | C08D007-04; | G02B005-23; | G02C007=10
- CC 63-7 (Pharmaceuticals)
  - Section cross reference(s): 38, 73
- IT Photochromic materials
  - (eyeglass lenges; photochromic coating composition for optical article)
- IT Coating materials
  - Eyeglass lenses
    - (photochromic, photochromic coating composition for optical article)

```
IT
    Lenses
```

(plastic; photochromic coating composition for optical

705967-98-2P 705967-99-3P 705968-00-9P TT

705968-01-0P 705968-02-1P 705968-03-2P

705968-04-3P 705968-05-4P 705968-06-5P

705968-07-6P 705968-08-7P 705968-09-8P

705968-10-1P 705968-11-2P 705968-12-3P

705968-13-4P 705968-14-5P

705968-17-8P 705968-18-9P 705968-19-0P

705968-20-3P 705968-21-4P 705968-32-7P

(photochromic coating composition for optical article)

REFERENCE COUNT: THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L24 ANSWER 7 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: . 2004:251909 HCAPLUS Full-text

140:276248 DOCUMENT NUMBER:

TTTLE: Method of manufacturing ophthalmic lenses made

from hydrophobic acrylic polymers

INVENTOR (S): Liao, Xiugao, Wilcox, Christopher D.

PATENT ASSIGNEE(S): Medennium, Inc., USA

U.S. Pat. Appl. Publ., 12 pp. SOURCE:

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

give a viscous solution

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DAT	•
US 2004056371 A1 20040325 US 2003-647875 200	30825
WO 2004029675 A1 20040408 WO 2003-US27811 200	30904
W: AT, BG, CH, CZ, DE, EE, ES, FI, GB, HU, JP, LU, PT, RO, S SK, TR RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, H IE, IT, LU, MC, NL, PT, RG, SE, SI, SK, TR	
EP 1543356 AI 20050622 EP 2003-754446 200 R: AT, BE, CH, DE, DK, ES, FF, GB, GR, IT, LI, LU, NU, SE. A	

PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK PRIORITY APPLN. INFO. ..P. 20020925

> US 2003-647875 A 20030825

and the second

WO:2003-US27811 W: 20030904

Entered STN: 26 Mar 2004

AB A method of forming an ophthalmic lens from a hydrophobic acrylic polymer composition comprises: (a) forming a pre-polymer gel from a hydrophobic acrylic polymer, (b) forming at least the optical portion of the ophthalmic lens from the pre-polymer gel in a fused silica mold, and (c) extracting the ophthalmic lens or its optical portion formed in step (b) such that the extracted lens remains transparent in an aqueous medium. A prepolymer was prepared from 2-(4-benzoyl-3-hydroxyphenoxy)ethyl acrylate and phenoxyethyl acrylate, then mixed with bisphenol A ethoxylate dimethacrylate crosslinker to

#### 10/549,696

1T 328233-84-7P, 2-(4-Benzoyl-3-hydroxyphenoxy)ethyl acrylate-bisphenol A ethoxylate dimethacrylate-phenoxyethyl acrylate copolymer

(method of manufacturing ophthalmic lenses made from hydrophobic acrylic polymers)

RN 328233-84-7 HCAPLUS

CN 2-Propenoic acid, 2-(4-benzoyl-3-hydroxyphenoxy)ethyl ester, polymer with  $\alpha,\alpha'$ -[(1-methylethylidene)di-4,1-

phenylene] bis  $[\omega-[(2-methyl-1-oxo-2-propenyl)oxy]$  poly (oxy-1,2-ethanediyl)] and 2-phenoxyethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 48145-04-6 CMF C11 H12 O3

 $PhO-CH_2-CH_2-O-C-CH=CH_2$ 

CM . 2

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

CCI PMS

PAGE 1-B

CM 3

CRN 16432-81-8

CMF C18 H16 O5

ICM B29D011-00 IC

INCL 264002500; 264002600

.63-7 (Pharmaceuticals)

Section cross-reference(s): 38

Intraocular lenses IT

UV stabilizers

(method of manufacturing ophthalmic lenses made from hydrophobic acrylic polymers)

87006-82-4P, Ethylene glycol dimethacrylate-methyl

methacrylate-stearyl methacrylate copolymer 328233-84-7P,

2-(4-Benzoyl-3-hydroxyphenoxy)ethyl acrylate-bisphenol A ethoxylate

dimethacrylate-phenoxyethyl acrylate copolymer 674297-94-0P,

2-(4-Benzoyl-3-hydroxyphenoxy) ethyl acrylate-ethylene glycol.

dimethacrylate-phenoxyethyl acrylate copolymer

(method of manufacturing ophthalmic lenses made from hydrophobic acrylic polymers)

ANSWER 8 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2003:950922 HCAPLUS Full-text

DOCUMENT NUMBER:

140:21310

TITLE: Process for producing photochromic layered product

with uniform thickness

INVENTOR (S): Mori, Katsuhiro; Nagoh, Hironobu; Momoda, Junji;

Izumi, Shinobu

PATENT ASSIGNEE(S): Tokuyama Corporation, Japan

SOURCE: PCT Int. Appl., 94 pp.

CODEN: PIXXD2

DOCUMENT TYPE: :Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION: .

PRIOR

PATENT NO KIND DATE APPLICATION NO.	DATE
WO 2003099550 A1 20031204 WO 2003-JP6525	20030526
W: AU, CN, JP, KR, US  RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB,  IE, IT, LU, MC, NL, PT, RO, SB, SI, SK, TR  AU 2003234848 A1 20031212 AU 2003-234848	GR. HU, 20030526
CN 1578727 A 20050209 CN 2003-801402	20030526
EP 1561571 A1 20050810 ER 2003-728138	20030526
P: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, NI, LU, NL, PT, IE, SI, FI, RO, CY, TP, BG, CZ, ER, HU, SK US 2007065633 A1 20070322 US 2004-486373	SE, MC,
CITY APPLN. INFO.: JP 2002-152551	A 20020527

ED Entered STN: 07 Dec 2003

Title process comprises (i) applying a photocurable composition containing a AB photochromic compound and a phosphorus type photoinitiator to the curved surface of a substrate and (ii) curing the photocurable composition by irradiation with active energy rays with intensity 0-5 at 200-300 nm, 25-75 at 300-400 nm, and 25-75% at 400-500 nm while keeping the substrate at  $\leq 100^{\circ}$ . homogeneous thin coating film containing a photochromic compound in a high concentration can be formed. Thus, a mixture comprising photochromic compound 3, 2,2-bis(4- methacryloyloxypolyethylene glycol phenyl)propane 43, polyethylene glycol diacrylate 15, trimethylolpropane trimethacrylate 15, EB 1830 polyester oligomer hexaacrylate 10, glycidyl methacrylate 10, ymethacryloyloxypropyltrimethoxysilane 7, CG 1184 1-hydroxycyclohexyl Ph ketone 0:375, bis(2,6-trimethoxybenzoyl)-2,4,4- trimethylpentylphosphine oxide 0.125, N-methyldiethanolamine 3, and LS 765 bis(1,2,2,6,6-pentamethyl-4piperidyl) sebacate 5 parts was applied on a thiourethane-based plastic lens with refractive index 1.60, irradiated with a D valve lamp with intensity 2 at 200-300 nm, 56 at 300-400 nm, and 28% at 400-500 nm to give a coated plastic lens, which was heat-treated at 110° and plasma-treated to give a test piece. with good durability, appearance, adhesion, photochromic property, low refractive index difference before and after coating, and yellow index 14. TT 521272-62-8P 627909-39-1P

(process for producing photochromic layered products with uniform thickness)

RN 521272 62-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-1, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with Ebecryl 1830, \(\alpha\), \(\alpha\) - [(1-methylethyl)idene) di-4,1-phenylene] bis \([\omega\) - [(2-methyl-1-oxo-2-propenyl) oxy] poly \((\omega\) - (\omega\) - (2-ethanediyl)], oxiranylmethyl 2-methyl-2-propenoate, \(\alpha\)-(1-oxo-2-propenyl) - \(\omega\)-[(1-oxo-2-propenyl) oxy] poly \((\omega\) oxy-1,2-ethanediyl) and 3-(trimethoxysilyl) propyl 2-methyl-2-propenoate \((\omega\) (9CI) \((\omega\) (CA INDEY NAME)

CM · 1

CRN 146479-65-4 CMT Unspecified CCT FMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 41637-38-1 CMT (\*12-H4 0) n (C2 H4 0) n C23 H24 O4 CCI PMS

PAGE 1-B

$$-CH_2 - n O CH_2$$

CM. 3

CRN 26570-48-9

CMF (C2 H4 O) n C6 H6 O3

CCI PMS

$$H_2C = CH - CH_2 - CH$$

CM 4

CRN 3290-92-4 CMF C18 H26 O6

CM 5

CRN 2530-85-0. CMF C10 P20 O5 Si

CM 6

CRN 106-91-2 CMF C7 H10 O3

RN 627909-39-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with  $\alpha,\alpha'$ -[(1-methylethylidene)di-4,1-phenylene]bis[ $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)], NK-Oligo U 6HA,  $\alpha$ -(1-oxo-2-propenyl)- $\omega$ -[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) and 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

C'M

CRN 116958-66-8 CMF Unspecified CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

CCI PMS

PAGE -1-8.

CM 3

CRN 29570-58-9

CMF C28 H34 O13

CM 4

CRN 26570-48-9

CMF (C2 H4 O) n C6 H6 O3

CCI PMS

$$H_2C = CH - CH_2 - CH$$

CM !

CRN 106-91-2 CMF C7 H10 O3

IC ICM B32B007-02

ICS: B32B027-00; G02B001-1,0.

CC 74-9 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38, 42, 63

IT Coating materials

Lenses

(photochromic; process for producing photochromic

layered products with uniform thickness)

lT Lenses

(plastic, substrates; process for producing photochromic layered products with uniform thickness)

IT Eyeglass lenses

Laminated plastic films Optical materials

Photochromic materials

## 10/549.696

(process for producing photochromic layered products with uniform
thickness)

IT 521272-62-8P 626244-04-0P 627909-39-1P

(process for producing photochromic layered products with uniform

thickness)

REFERENCE COUNT:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L24 ANSWER 9 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:644296 HCAPLUS Full-text

DOCUMENT NUMBER:

130-165525

TITLE:

Cast polymerization for eyeglass plastic lenses

INVENTOR(S):

Matsunaga, Hideki

PATENT ASSIGNEE (S):

Seiko Epson Corp., Japan Jpn. Kokai Tokkyo Koho, 5 pp.

SOURCE:

Jpn. Kokal Tokkyo Kono, 5 p CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO	:	DATE
JP 2003231134	A 20030819	JP 2002-32980		20020208
PRIORITY APPLN. INFO.:		Z JP 2002-32980		20020208

ED Entered STN: 19 Aug 2003

In the cast polymerization process comprising forming molds by winding pressure-sensitive adhesive tape around periphery of 2 molds faced oppositely at a fixed interval, forming a hole through the adhesive tape, pouring liquid photocurable plastic lens materials into the mold through the hole by a syringe, and irradiating light, the hole is not sealed after pouring of the materials, which are then cured. Thus, bisphenol A diglycidyl ether dimethacrylate 40, nonabutylene glycol dimethacrylate 20, Ph methacrylate 25, TPDI-2-hydroxypropyl methacrylate (1:2) adduct 15, 2,4,6-trimethylbenzoyldiphenylphosphine oxide 0.03, 2-hydroxy-4-methoxybenzophenone 0.05, and tridodecyl phosphate 0.2 g were plended and degassed to give a UV-curable lens material, which was poured into a mold and irradiated with UV to give a lens with good appearance.

214915.00-1P, Bisphenol A diglycidyl ether
dimethacrylate-nonabutylene glycol dimethacrylate-phenyl
methacrylate-1:2 IPDI/2-hydroxypropyl methacrylate adduct copolymer
(cast molding of eyeglass plastic lenses with good appearance)

RN: 214915-00-1: HCAPLUS

2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester: polymer with 5,10,15,20,25,30,35,40-octaoxatetratetracontane-1,44-diyl bis(2-methyl-2-propenoate), phenyl 2-methyl-2-propenoate and 2-[[[[[1.3,3-trimethyl-5-[[[1-methyl-2-](2-methyl-1-oxo-2-propenyl)oxy]ethoxy]carbonyl]amino]cyclonexyl]methyljamino]carbonyl]ox y[propyl 2-methyl-2-propenoate (3CI) (CA INDEX NAME)

CM []

CRN 76701-94-5 CMF C26 H42 N2 O8

CM - 2

CRN 17.622-68-3 CMF C44 H82 O12

PAGE 1-A

PAGE 1 B

CM :

CRN 2177-70-0 CMF C10 H10 O2

CM 4

CRN 1565-94-2 CMF C29 H36 O8

PAGE 1-A

PAGE 1-B

O CH2

IC: ICM B29C039-24

ICS B29C039-02; B29C039-26; B29L011-00

CC: 38-2 (Plastics Fabrication and Uses)

Section cross-reference(s): 63

Eyeglass: Lenses

(cast molding of eyeglass plastic lenses with good appearance)

TT 214915-00-1P, Bisphenol A diglycidyl ether

dimethacrylate-nonabutylene glycol dimethacrylate-phenyl

methacrylate-1:2 IPDI/2-hydroxypropyl methacrylate adduct copolymer (cast molding of eyeglass plastic lenses with good appearance)

L24 ANSWER 10 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:590539 HCAPLUS Full-text

DOCUMENT NUMBER: 139:154966

TITLE: Manufacture of photochromic contact lenses

INVENTOR(S): Van Gemert, Barry; Kumar, Anil; Mallak, Frank P.;

Walters, Robert W.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 10 pp.:

CODEN: USXXCO:

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1.

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003142267	A1	20030731	US 2002-315656	20021210
WO 2004052631	A2	20040624	WÖ 2003-US39403.	20031210
wo. 2004052631	A3	20040910		
			BA, SB, GG, BR, bW, DK, DM, DE, EC, EE.	
GB, GD, GE	, GH, GM,	HR, HU,	ID. IL, IN, IS, JP,	KE, KG, KP,
			LU, LV, MA, MD, MG, PH, PL, PT, RO, RU,	
	, SY, TJ,		TR, TT, TZ, UA, UG,	
• • • • • • • • • • • • • • • • • • • •	•	MW, MZ,	SD, SL, SZ, TZ, UG,	ZM, ZW, AM,

#### 10/549,696

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AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE,
             DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
             SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
                                                                     20031210
    AU 2003297878
                          A 1
                                 20040630
                                             AU 2003-297878
    EP 1575761
                          A2
                                 20050921
                                             EP 2003-796947
                                                                     20031210
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
             PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     BR 2003016591
                                 20051004
                                             BR 2003-16591
                                                                     20031210
     JP 2006503338:
                                20060126
                                             JP 2004-558695
                                                                     20031210
                                                    e -.-
                                                                     20031210
     CN 1732078
                          . Α
                                 20060208
                                             CN 2003-80101704.
PRIORITY APPLN. INFO.:
                                             US 2001-340047F
                                                                    20011210
                                                                  A 20021210
                                             US 2002-315656
                                                                    20031210
                                             WO 2003-US39403
ED
     Entered STN: 01 Aug 2003
```

Described are contact lenses having photochromic materials within the central AB or pupillary area of the lens and methods for manufacturing such lenses. In one method, a photochromic amount of 1 photochromic material is added to the pupillary region of a casting mold containing a polymerizable monomer that can be at least partially cured before and/or after the addition Another method involves providing an amount of polymerizable photochromic monomer for the pupillary region and an amount of polymerizable non-photochromic monomer for the remainder of the contact lens in a casting mold. The photochromic and non-photochromic monomers can differ by their d.p., viscosity and/or d. To the concave half of a crown glass casting mold having a 6 base curvature was added 4 drops of SR 9036 and 2 drops of SR 348 monomer containing approx: 2% of a photochromic naphthopyran that exhibits a blue color when irradiated with UV light, and 0.5% of Irgacure-819. A lens having an outside diameter of . about 1 in, or 2.54 cm, a clear lens body and a colored pupillary region of about 0.44 in or 1,11 cm was obtained from the above polymer. The lens was exposed to UV radiation and the pupillary region became darker and after the UV radiation was discontinued, the pupillary region became less dark. IT

133551-17 3P; Sartemer 9036-Sartomer 348 copolymer (manufacture of photochromic contact lenses)

RN 138551-37 8 HCAPLUS

2 Propenoic acid, 2-methyl., (1-methylethylidene)bis (4,1 phenyleneoxy-2,1-ethanediyl) ester, polymer with α,α'-[(1-methylethylidene)di+4,1-phenylene]bis[ω-[(2-methyl-1-oxo-2-propenyl)cxy]poly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CN

CRN 41637-38-1

CMF. (C2 H4 O)n (C2 H4 O)n C23 H24 O4

CCT PMS:

PAGE 1-A

PAGE 1-B

CM : 2

CRN 24448-20-2 CMF C27 H32 O6

IC ICM G02C007-04

ICS B29D011-00

INCL 351160000R; 264001709

CC 63-7 (Phaimaceuticals)

IT Photochromic materials

(eyeglass lenses; manufacture of photochromic contact lenses)

IT Contact Lenses

Molds (forms)

Polymerization catalysts

Viscosity.

(manufacture of photochromic contact lenses)

IT Eyeglass lenses

(photochiomic; manuracture of photochromic contact lenses)

IT 138551-37-8P, Sartomer 5036-Sartomer 348 copolymer (manufacture of photochromic contact lenses)

L24 ANSWER 11 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2002:347818 HCAPLUS Full-text

DOCUMENT NUMBER:

136:370720

TITLE:

Plastic lenses bearing cured protective films with

good stainability and resistance to impact,

scratch and weather

INVENTOR(S):

Iryo, Takeaki; Kinoshita, Atsushi; Mizuno,

## 10/549:696

PATENT ASSIGNEE(S):

Hitoshi; Kanai, Toshihito Seiko Epson Corp., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent .

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

|--|--|

JP 2002131702

KIND	DATE	APPLICATION NO.	DATE
Α	20020509	JP 2000-319544	20001019

PRIORITY APPLN. INFO.

JP 2000-319544

20001019

Entered STN: 09 May 2002 ED.

The lenses useful for eyeqlass are made from the radiation-curable compns. ·AB containing: (A) CH2:CHC6H4CH2SXOH (X = C1-4 alkylene)/isocyanate reaction. products, 10-70, (B) di(meth)acrylate esters of alkoxylated HOZCH2SH [Z = (optionally halogenated) phenylene group! (Sic), 10-60, and (C) other unsatd componers 1-60 parts and have been primed with a stainable layer and coated with a stainable silicone-based hard coat layer. Thus, adding Takenate 500 (m-xylylene diisocyanate) 188 to a mixture of 2-(4-vinylbenzylthio) ethanol and 2-(3- vinylbenzylthio)ethanol, 398, Bu2Sn dilaurate 0.30 and hydroquinone monomethyl ether 0.06 g at 60° over 3 h and reacting at 80° for 5 h gave a Scontaining urethane (I): Molding a mixture of I 40, p-bis( $\beta$ methacryloyloxyethylthic)xylene 35, 2,2-bis(4-

methacryloyloxydiethoxyphenyl) propane 15, benzyl methacrylate 10, 2-hydroxy-4methoxybenzophenone 0.03, tri-Et phosphite 0.5, (2,4,6-

trimethylbenzoyl)diphenylphosphine oxide 0.05 and tert-Bu peroxvisobutyrate C.1 q gave lens which was then primed with a polyester polyol-based polyurethane layer and coated with a hard silicone layer to give a plastic lens with stainable surface.

422569-83-3P

(plastic lenses bearing cured protective films with good stainability and resistance to impact, scratch and weather)

422569-83-3 HCAPLUS RN

2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-CN 2,1-ethanediyloxy-2,1-ethanediyl) ester polymer with bis[2+[[(3-ethenylphenyl)methyl]thio]ethyl] 1,3phenylenebis (carbamate), bis [2-[[(4-ethenylphenyl)methyl]thio]ethyl] 1,3-phenylenebis [carbamate], 1,4-phenylenebis (methylenethio-2,1ethanediyl) bis(2-methyl-2-propenoate) and phenylmethyl-2-methyl-2-propenoate (9CI) (CA INDEX NAME)

422569-82-2 CMF C30 H32 N2 04 SD

PAGE 1-B

PAGE 1-B

$$-CH_2-S-CH_2$$
  $CH=-CH_2$ 

CM 2

CRN 422569-81-1 CMF C30 H32 N2 O4 S2

PAGE 1-A  $CH_2 = CH_2 = CH_2 = CH_2 = CH_2 = 0$   $CH_2 = S = CH_2 = CH_2 = 0$   $NH = C = 0 = CH_2$ 

— CH2— S— CH2

- CM . . . 3

CRN 112503-98-7 CMF C20 H26 O4 S2

O CH2
H2C O
Me—C—C—CH2—CH2—S—CH2—S—CH2

CM 4

CRN 56744-60-6 CMF C31 H40 O8

PAGE 1-A

PAGE 1-B

CM 5

CRN 2495-37-6 CMF C11 H12 O2

H2C O Me\_C\_C\_O\_CH2\_Ph

IC ICM G02C007-02

ICS C08F212-14; C08F220-38; C08J007-04; C09D183-04; G02B001-04; G02B001-10; G02B001-11; B05D007-00; B05D007-02; C08L025-08;

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 42, 63

IT Coating materials

Lenses

(plastic lenses bearing cured protective films with good stainability and resistance to impact, scratch and weather)

II 422569-33-3P

(plastic lenses bearing cured protective films with good stainability and resistance to impact, scratch and weather)

1524 ANSWER 12 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:51908 HCAPLUS Full text

DOCUMENT NUMBER:

136:123714

TITLE:

Method for incorporating additives in an

ophthalmic article by means of a supercritical

fluid

INVENTOR(S):

Baillet, Gilles; Cano, Jean-Paul, Magne,

Jean-Francois

PATENT ASSIGNEE (\$):

Fr.

SCURCE:

U.S. Pat. Appl. Publ., 12 pp., Cont.-in-part of

U.S. Ser. No. 242, 384, abandoned.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

#### PATENT INFORMATION:

•	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 2002006469	A1	20020117	US 2000-729648	20001204
	FR 2752462	A1	19980220	FR 1996-10229	19960814
	FR 2752462	B1	19981023		
	WO 9807054	A1	19980219	WO 1997-FR1469	19970808
				. <	
·	W: AU, JP, US				
	RW: AT, BE, CH, PT, SE	DE, DK	, ES, FI,	FR, GB, GR, IE, IT, L	U, MC, NL,
	US 2004018300	Al.	20040129	US 2003-616407	20030709
	US 2005019485	A1	20050127	< US 2004-921090	20040318
PRIO	RITY APPLN. INFO.:			FR 1996-10229	A 19960814
				WO 1997-FR1469	W 19970808
				US 1999-242384	B2 19990212
÷				US 2000-729648	B1 20001204
				US 2003-616407	B1 20030709

ED Entered STN: 18 Jan 2002

The method comprises introducing into a reactor including a transparent polymer substrate containing a free plasticizer and the photochromic additive supercrit. fluid and maintaining this fluid in the reactor for the time necessary for incorporating the photochromic additive into the article, removing the supercrit. fluid and recovering the ophthalmic article in which the photochromic additive has been incorporated. The composition containing ethoxybisphenol A dimethacrylate (2.5 ethoxy units) 43.5, PEG terminated at both ends by methacrylate 21.0, 1,3-diisopropenylbenzene 6.0, 2-phenoxyethyl methacrylate 20.5, PEG containing a benzoate ending at both ends 3.6, tri-Photosphite 0.3; di-Et pyrocarbonate 0.15, diisopropyl peroxydicarbonate 1.5, CG-tert-Bu O-2-ethylhexyl monoperoxycarbonate 0.5 parts by weight was cured and the polymer was removed from the mold. The additive to be incorporated by using supercrit. fluids was a mixture of photochromic dyes.

IT 389124-86-19

(method for incorporating additives in ophthalmic article by means of a supercrit. fluid)

RN 389124-26-1 HCAPLUS

CN 2-Propencic acid, 2-methyl-, 2-phenylethyl-ester, polymer with 1,3-bis(1-methylethenyl)benzene, α,α: [(1-methylethylethenyl)benzene, α,α: [(1-methylethylethylethylethenyl)benzene]bis[ω-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] and α-(2-methyl-1-oxo-2-propenyl)-ω-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl). (9CL) (CA INDEX NAME)

CM :

CRN 41637-38-1 CMP (C2 H4 O)n (C2 H4 O)n C23 H24 O4

PAGE 1 - A

PAGE 1-B

$$-CH_2 - n O CH_2 - Me$$

25852-47-5

(C2 H4 O) n C8 H10 O3

PMS

CRN 3748-13-8 CMF C12 H14

CM

CRN 3683-12-3 CMF C12 H14 O2 H2C O || || Me-C-C-C-O-CH2-CH2-Ph

IC ICM B05D005-06

ICS C23C016-00

INCL 427162000

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 42

IT Contact lenses

Eyeglass lenses

Glass transition temperature
Photochromic materials

Plasticizers

Supercritical fluids

(method for incorporating additives in ophthalmic article by means of a supercrit. fluid)

IT 389124-86-1P

(method for incorporating additives in ophthalmic article by means of a supercrit. fluid)

L24 ANSWER 13 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2002:26239 HCAPLUS Full-text

DOCUMENT NUMBER:

136:91025

TITLE:

Plastic photochromic lenses for eyeglass with

quick darkening and fading cycle

INVENTOR (S):

. Kadowaki, Shinichiro

PATENT ASSIGNEE(S):

Hoya Corp., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

JOCOMBNI IIID.

Patent

LANGUAGE:

Japanese 1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO. KIND DATE	AP	PLICATION NO. DATE	
:	JP 2002006272 A 20020109	 ЈР	2000-192967 20000627	
	JP 3892210	ia.		٠,
r O P	TTV ADDING THEOU	.TD	2000-192967 20000627	

ED Entered STN: 10 Jan 2002

The lenses contain a mixture of (A) photochromic dyes having main absorption for wavelength of 540-640 nm during the color transition in the lens resin, absorption half width \$120 nm and fading half-life of \$90 s. (3) photochromic dyes having main absorption for wavelength of 420-540 nm and (C) photochromic dyes having main absorption for wavelength of 540-640 nm and fading half-life at 20° 2-20 times of that of A. Thus, mixing 2,2-bis[4-(methacrylexyethoxy)phenyl]propane 50 with triethylene glycol dimethacrylate 40, glycidyl methacrylate 10, 2,4-diphenyl-4-methyl-1-pentene 1, CNN-7 (photochromic dye having blue color, main absorption at 610 nm, absorption half width 160 nm, fading half-life 55 s) 0.040, CNN-4 (photochromic dye having yellow color, main absorption at 440nm, fading half-life 300 s) 0.020, CNN-3 (photochromic dye having blue color, main absorption at 592 nm, absorption half width 85 nm and fading half-life 125 s) 0.005, tert-Bu peroxyneodecanate 0.50 and KF 353A (silicone release agent) 0.0001 part,

molding the resulting mixture and annealing gave a lens test piece with gray color, fading half-life 55 s and stable coloration.

IT 386705-23-3P, 2,2-Bis[4-(methacryloxyethoxy)phenyl]propane;
glycidyl methacrylate;triethylene glycol dimethacrylate copolymer
386705-24-4P, Benzyl acrylate;2,2-bis[4-

(methacryloxyethoxy)phenyl]propane;glycidyl methacrylate;triethylene glycol dimethacrylate-trimethylolpropane trimethacrylate copolymer

(plastic photochromic lenses for eyeglass with quick darkening and fading cycle)

RN 386705-23-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester, polymer with (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) bis(2-methyl-2-propenoate) and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM :

CRN 24448-20-2 CMF C27 H32 O6

CM: 2

CRN 109-16-0 CMF C14 H22 O6

CM 3

CRN 106-91-2 CMF C7 H10 O3

RN 386705-24-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl)

ester, polymer with 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl bis(2-methyl-2-propenoate), (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) bis(2-methyl-2-propenoate), oxiranylmethyl 2-methyl-2-propenoate and phenylmethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 24448-20-2 CMF C27 H32 O6

CM 2

CRN 3290-92-4 CMF C18 H26 O6

·CM· 3

CRN 2495-35-4 CMF C10 H10 O2

CM

CRN 109-16-0 CMF C14 H22 O6

CM 5

CRN 106-91-2 CMF C7 H10 O3

CH2-0-CH2 CH2

IC : ICM : G02C007-10 :

ICS C08F002-44; C08J007-00; C08J007-04; C08K005-00; C08L101-00

CC - 63-7 (Pharmaceuticals):

Section cross-reference(s): 38, 41

IT Photochromic materials

(dyes; plastic photochromic lenses for eyeglass with quick

darkening and fading cycle)

IT Eveglass lenses

(plastic photochromic lenses for eyeglass with quick darkening and fading cycle)

TT 386705-23-3P, 2,2-Bis[4-(methacryloxyethoxy)phenyl]propane; glycidyl methacrylate;triethylene glycol dimethacrylate copolymer 386705-24-4P. Benzyl acrylate;2,2-bis[4-

(methacryloxyethoxy)phenyl]propane;glycidyl methacrylate;triethylene glycol dimethacrylate-trimethylolpropane trimethacrylate copolymer (plastic photochromic lenses for eyeglass with quick darkening and fading cycle)

L24 ANSWER 14 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2001:152534 HCAPLUS Full-text

ACCESSION NUMBER: 2001:152534 AC

DOCUMENT NUMBER: 134:212773

TITLE: Homopolymers containing crosslinkers and ocular

implants made therefrom

INVENTOR(S): Liao, Xiuago, Gulati, Vijay

PATENT ASSIGNEE(S): Medennium, Inc., USA SOURCE: PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE APPLICATION NO.	DATE
₩O 2001013972	A1 .	20010301 WO 2000-US23295	20000824
W: AE AL	, AM, AT, AU	, AZ, BA, BB, BG, BP, BY, CA, (	CH, CN, CU,
•		, FI, GB, GD, GE, GH, GM, HR, I	

## 10/549,696

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MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE,
             SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
             BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6271281
                          Вì
                                 20010807
                                             US 1999-383837
     CA 2382458
                          A1
                                 20010301
                                             CA 2000-2382458
                                                                     20000824
     EP 1206293
                          A1:
                                 20020522
                                             EP 2000-959377
                                                                     20000824
     EP 1206293
                                 20060705
                          B1
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
             PT, IE, SI, LT, LV, FI, RO, MK, CY, AL
                                                                     20000824
     JP 2003507133
                                 20030225
                                             JP 2001-518105
     ÁT 332155
                                 20060715
                                                                     20000824
                                             AT 2000-959377
                                             ES 2000-959377
                                                                     20000824
     ES 2265972
                           T3
                                 20070301
    .US 2003055122
                                 20030320.
                                             US 2001-865845
                                                                     20010525
                          Α1
                                             US 2002-279555
     US 2004034118
                                 20040219
                                                                     20021024
                          A1.
                                 20040824
     US 6780899
                          B2
                                             US 1999-383837.
PRIORITY APPLN, INFO .:
                                                                     19990826
                                             WO 2000-US23295
                                                                     20000824
                                             US 2001-865845
                                                                  B1 20010525
```

ED Entered STN: 02 Mar 2001

Ocular implants composed of homopolymers containing stable elasticity inducing crosslinkers which contain rigid chemical groups disposed between at least two polymerizable ethylenically unsatd, chemical groups are disclosed. These coular implants are stable, elastic, soft, optically clear, have high refractive index and low-tack surfaces. Intraocular leases were made by polymerization of ethylene glycol Ph ether acrylate, bisphenol A ethoxylate dimethacrylate, and 2-(4-benzoyl-3-hydroxyphenoxy) ethyl acrylate. The leases were soft, had refractive indexes as high as 1.559 with a glass transition temperature of around 5-10°.

IT 328233-84-7P 328238-44-4P.

(homopolymers containing crosslinkers and ocular implants made therefrom)

RN 328223-84-7 HCAPLUS

ON 2-Propendic acid, 2-(4-benzoyl-3-hydroxyphenoxy) of the leater, polymer with a/a + ((1-methylethylidene) di-4, 1-

phenylene|bis[w-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] and 2-phenoxyethyl 2-propendate (9CI) (CA INDEX NAME)

CM', l

CRN 48145-04-6 CMF C11 H12 O3

PhG-CH2-CH2-O-C-CH-CH2

PAGE 1-B

CM 2.

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

CCI PMS

CM 3

CRN 16432-81-8 CMF C18 H16 O5

RN 328238 44-4 HCAPLUS

CN 2-Propenoic acid, 2-(4-penzoyl-3-hydroxyphenoxy)ethyl ester, polymer with  $\alpha,\alpha$  -[(1-methylethylidene)di-4,1-

phenylene bis [ (2-methyl-1-oxo-2-propenyl) cxy poly [oxy (methyl-1,2-ethanediyl)] and 2-phenoxyethyl 2-propenoate (9CI) (CA INDEX NAME)

CM.

CRN 48145-04-6 CMF C11 H12 O3

CM - 2

CRN 42610-22-0

CMF (C3 H6 O)n (C3 H6 O)n C23 H24 O4

CCI IDS, PMS

PAGE 1-B

CM 3

CRN 16432-81-8... CMF C18 H16 O5

IC ICM A61L027-50

CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 38

Crosslinking agents

Glass transition temperature

Intraocular lenses

Refractive index

UV radiation

(homopolymers containing crosslinkers and ocular implants made therefrom)

328233-84-7P 328238-44-4P TT

> (homopolymers containing crosslinkers and ocular implants made therefrom)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 15 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN 2000:790745 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER:

133:355242

TITLE:

Composite ophthalmic lens made from two polymer

films

INVENTOR(S):

Jiang, Peiqi; Cabeza, Stephane; Menduni, Gilbert

PATENT ASSIGNEE(S): Essilor International Compagnie Generale

d'Optique, Fr.

PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent French

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICA	TION NO.	DATE
WO 2000067050	A1 2000	1109 WC 2000	-FR1160	20000428
W: AE, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR	, BY, CA, CH,	CN, CR,
CU, CZ,	DE, DK, DM, DZ,	EE, ES, FI, GE	, GD, GE, GH,	GM, HR,
	IL, IN, IS, JP,			
LT, LU,	LV, MA, MD, MG,	MK, MN, MW, MX	, NO, NZ, PL,	PT, RO
RU, SD,	SE, SG, SI, SK,	SL, TJ, TM, TR	TT, TZ, UA,	UG, US,
UZ, VN,	YU, ZA, ZW			
	KE, LS, MW, SD,			
DE, DK,	ES, FR, FR, GB,	GR, IE, IT, LU	, MC, NL, PT,	SE, EF,
BJ, CF,	CG, CI, CM, GA,	GN, GW, ML, MR	, NE, SN, TD,	TG
FR 2793038	A1 2000	1103 FR 1999	-5466	19990429
			<	
FR 2793038	B1 2002			
EP 1177465	A1 2002.	0206 EP 2000	-925356	20000428
			<	
	B1 : 2006			
	CH, DE, DK, ES,		C, LI, LU, NL,	SE, MC,
	SI, LT, LV, FF,			
AT 322698	T 2006	0415 AT 2000	-925356	20000428
			<	
US 2002164484	A1 2002	1107 US 2001	37802	20011029
****			<	
00 0,0020.	32 2004			7 10000400
RIORITY APPLN. INFO		FR 1999	7~5466	A 19990429
		WO 2000		W 20000428
			<	

10 Nov 2000 Entered STN:

The invention concerns a composite ophthalmic lens comprising a first film at least 200 µm thick, forming a front part of said lens, of a polymer material with a refractive index not less that 1.60 and having a front face forming a front optical surface, and a second film, at least 200 µm thick, of a second polymer material forming the rear part of said lens and having a rear face forming a rear optical surface, the interface between said two films forming an optical surface parallel to the rear optical surface. The invention is applicable to lenses of spectacles. A composite ophthalmic lens was prepared from a polythiourethane film and a poly(allyl carbonate) film.

IT 103183-05-7P

(composite ophthalmic lens made from two polymer films)

RN 103183-05-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,1'-[(1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl)] ester, polymer with  $\alpha$ -(2-methyl-1-oxo-2-propen-1-yl)- $\omega$ -[(2-methyl-1-oxo-2-propen-1-yl)oxy]poly(oxy-1,2-ethanediyl) (CA INDEX NAME)

CM 1

CRN 25852-47-5

CMF (C2 H4 O)n C8 H10 O3

CCI PMS

ČM 2

CRN 24448-20-2 CMF C27 H32 O6

IC ICM G02B001-04

ICS G02C007-02; B29D011-00

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 38

TT Eyeglass lenses

Eveglasses

(composite ophthalmic lens made from two polymer films)

IT 25656-90-0P, CR39 103183-05-7P 115959-74-5P:

(composite ophthalmic lens made from two polymer films)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES A

6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT.

# 10/549,696

L24 ANSWER 16 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2000:421198 HCAPLUS Full-text

DOCUMENT NUMBER: 133:59236

TITLE: Crosslinked polymers and refractive devices formed

therefrom for intraocular lenses

INVENTOR(S): Muir, Andrew Victor Graham; Rowan, Lee; Jones,

Stephen Alister; Stedman, John Charles

PATENT ASSIGNEE(S): Biocompatibles Limited, UK

SOURCE: PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2000035980	A1 20000622	WO 1999-GB4206	19991213
W: AE, AL, AM,	AT, AU, AZ, BA,	BB, BG, BR, BY, CA, CI	I, CN, CR,
CU, CZ, DE,	DK, DM, EE, ES,	FI, GB, GD, GE, GH, GM	1, HR, HU,
		KP, KR, KZ, LC, LK, L	
		MW, MX, NO, NZ, PL, P	
		TM, TR, TT, TZ, UA, UC	
VN, YU, ZA,	ZW, AM, AZ, BY,	KG, KZ, MD, RU, TJ, TM	1
		SZ, TZ, UG, ZW, AT, BI	
DE, DK, ES,	FI, FR, GB, GR,	IE, IT, LU, MC, NL, PT	r, se, br,
		GW, ML, MR, NE, SN, TI	
CA 2353917	A1 20000622	CA 1999-2353917	19991213
EP 1141054	A1 20011010	EP 1999-959593	19991213
		<	
EP 1141054	B1 20040225		
R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU, NI	SE, MC,
PT; LE SI,	LT, LV, FI, RO		
JP 2002532588	T 20021002	JP 2000-588235	19991213
and the second of the second o			
AU 756846	B2 20030123	AU 2000-16726	19991213
NZ 512100	A 20036926	NZ 1999-512100	19991213
	A 20030920	N2 1999-312100	19991213
AT 260306	T 20040315	AT 1995-959593	19991213
US 6767979	B1 20040727	< US 2001-857845	20010920
	22 20010121		20020020
RITY APPLN. INFO.:		한 1993-310163	A 19981211
		WO 1999-GE4206	W 19991213

ED Entered STN: 23 Jun 2000

AB A polymer is formed of ethylenically unsated monomers including a zwitterionic monomer, an aromatic monomer and a crosslinking monomer. Preferably the crosslinking monomer includes at least one aromatic group containing compound and at least one aliphatic group containing compound. The polymer is waterswellable and a hydrogel has optical and mech, properties rendering it suitable for use as an intraocular refractive device such as an intraocular lens. A copolymer was prepared from Bz acrylate, 2-methacryloyloxyethyl-2-trimethylammonium ethylphosphate inner salt, fauryl Methacrylate, ethylene glycol dimethacrylate, and bisphenol-A dimethacrylate.

277317-50-7P 277317-52-9P 277317-53-0P IT 

277317-54-1P 277317-57-4P

(crosslinked polymers and refractive devices formed therefrom for intraocular lenses)

RN 277317-50-7 HCAPLUS

3,5,8-Trioxa-4-phosphaundec-10-en-1-aminium, 4-hydroxy-N,N,N,10-CNtetramethyl-9-oxo-, inner salt, 4-oxide, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate), (1-methylethylidene)di-4,1-phenylene bis(2-methyl-2-propenoate) and phenylmethyl 2-propenoate (9CI) INDEX NAME)

CM. 1

CRN 67881-98-5 CMF C11 H22 N 06 P

Me3+N\_CH2\_CH2\_O\_P\_G\_CH2\_CH2\_O\_

 $CM_{\rm c} \lesssim 2$ 

CRN 3253-39-2 CMF: C23 H24 O4

CM

CRN 2495-35-4 C10 H10 02 CMF

CM

CRN 97-90-5 CMF C10 H14 04

RN 277317-52-9 HCAPLUS

CN 3,5,8-Trioxa-4-phosphaundec-10-en-1-aminium, 4-hydroxy-N,N,N,10-tetramethyl-9-oxo-, inner salt, 4-oxide, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate), 2-fluoroethyl 2-methyl-2-propenoate, (1-methylethylidene)di-4,1-phenylene bis(2-methyl-2-propenoate) and phenylmethyl 2-propenoate (9CI) (CA INDEX NAME)

CM :

CRN 67881-98-5 CMF C11 H22 N O6 P

0 CH2 Me3+N\_CH2-CH2-O\_CH2-CH2-O\_C\_C\_Me

CM · 2

CRN 3253-39-2 CMF C23 H24 04

CM 3:

CRN 24.95-35-4 CMF C10 H10:02

Ph-CH2-0-C-CH---CH2

CM 4

CRN 97-90-5 CMF C10 H14 O4

## 277317-53-0 · HCAPLUS

3,5,8-Trioxa-4-phosphaundec-10-en-1-aminium, 4-hydroxy-N,N,N,10
tetramethyl-9-oxo-, inner salt, 4-oxide, polymer with dodecyl
2-methyl-2-propenoate, 1,2-ethanediyl bis(2-methyl-2-propenoate),
(1-methylethylidene)di-4,1-phenylene bis(2-methyl-2-propenoate) and
phenylmethyl 2-propenoate (9CI) (CA INDEX NAME)

#### CM :

RN

CRN 67881-98-5 CMF C11 H22 N C6 P

CM 2

CRN 3253-39-2 CMF C23 H34 Q4

CM 3

CRN 2495-35-4 CMF C10 H10 O2

CM 4

CRN 142-90-5 CMF C16 H30 O2

CM 5

CRN 97-90-5 CMF C10 H14 O4

RN 277317-54-1 HCAPLUS

3,5,8-Trioxa-4-phosphaundes-10-en-1-aminium, 4-hydroxy-N,N,N,10-tetramethyl-9-oxo- inner salt, 4-oxide, polymer with (1-methylethylidene)di-4-l-phonyaene bis(2-methyl-2-propenoate) and phenylmethyl-2-propenoate (9CI) (CA INDEX NAME)

CM :

CRN 67881-98-5 CMF C11 H22 N O6 P

CM 2

CRN 3253-39-2 CMF C23 H24 O4

CM 3

CRN 2495-35-4 CME C10 H10 O2

RN 277317-57-4 HCAPLUS

CN 3,5,8-Trioxa-4-phosphaundec-10-en-1-aminium, 4-hydroxy-N,N,N,10-tetramethyl-9-oxo-, inner salt, 4-oxide, polymer with dodecyl 2-methyl-2-propenoate, 1,2-ethanediyl bis(2-methyl-2-propenoate), 2-fluoroethyl 2-methyl-2-propenoate, (1-methylethylidene)di-4,1-phenylene bis(2-methyl-2-propenoate) and phenylmethyl 2-propenoate (9CI) (CA INDEX NAME)

CM ...

CRN 67881-98-5 CMF C11 H22 N O6 P

CM.

CRN 3253-39-2 CMF C23 H24 O4

CM :

CRN 2495-35-4 CMF Cl0 H10 O2

CM 4

CRN 686:54-4 CMF C6 H9 F O2

CM 5

CRN +42-90-5 CMF C16 H30-O2

CM (

CRM 197-90-5 CMF 1010 H14-04

ICM C08F246-00 IC

ICS G02B001-04

35-4 (Chemistry of Synthetic High Polymers) CC ·

Section cross-reference(s): 63

Intraocular lenses

(crosslinked polymers and refractive devices formed therefrom for intraocular lenses)

277317-50-7P 277317-52-9P 277317-53-0P IT

277317-54-1P 277317-57-4P 277317-60-9P

277317-62-1P

(crosslinked polymers and refractive devices formed therefrom for intraocular lenses)

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 17 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER:

1999:596964 HCAPLUS Full-text

DOCUMENT NUMBER: .

131:233599

TITLE:

Modification of medical polymers and polymer base.

materials for medical use

INVENTOR(S):

Hogi, Tsuneo

PATENT ASSIGNEE (S):

Asahi Chemical Industry Co., Ltd., Japan

SOURCE:

Jon. Kokai Tokkyo Kolio, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. PATENT NO. KIND DATE 19990921 JP 1998-75087 JP 11255925 ... Α 19980310

JP. 3444781

B2 20030908

PRIORITY APPLA: INFO ...

JP 1998-75087

19980310

Entered STN: 22 Sep 1999

A method for modification of medical polymers involves: [1] placing polymer AΒ materials, additives practically immiscible with the polymer materials, and Tow woll weight compds, soluble in supercrit, fluids in a pressure container, [2] spaking the polymer base materials [dissolved in supercrit. fluid] in polymer swelling promoters, [3] allowing the supererit fluid to flow through the container to sep the polymer swelling promoters and [4] reducing the pressure in the container to incorporate additives into the base materials. The materials are useful for manufg contact lenses, eye glass lenses, intraobular langes and catheters.

160005-82-3P TI

> (modification of medical polymers and polymer base materials for medical use)

160605-82-3 HCAPLUS

2 Propenoic acid, butyl ester, polymer with ethenylbenzene and  $\alpha, \alpha \in \{(1-\text{metroylethylidene}) \text{ di-4}, 1-\text{phenylene}\} \text{ bis } [\omega-[(2-\omega)]]$ methy: -1-cxo-2-propenyl)oxylpoly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX HAME)

CRN 41637-38-1.

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4 CCI PMS

PAGE 1-A

PAGE 1-B

CM 2

CRN 141-32-2 CMF: C7 H12 C2

CM :

CRN 100-42-5 CMF C8 P8

H2C == CH-Ph

IC ICM C08J007-00

ICS A61L027-00; A61L029-00; C08L033-04; C08L083-00; G02B001-04; G02C007-04

CC 63-7 (Fnarmaceuticals)

IT Biological materials Contact lensos

Dyes"

Eyeglass lenses Intraocular lenses Medical goods

Photochromic materials Softening agents Supercritical fluids Swelling agents UV stabilizers

> (modification of medical polymers and polymer base materials for medical use)

79-10-7DP, Acrylic acid, copolymers with siloxanyl methacrylate and IT fluoromethacrylate, modified 79-41-4DP, MethAcrylic acid, copolymers with Me acrylate siloxanyl methacrylate and fluoromethacrylate, 80-62-6DP, Methyl Methacrylate, copolymers with fluoromethacrylate and acrylic acid; modified 18358-13-9DP, Methacrylate, siloxanyl and fluoro-, copolymers with acrylic acid, modified, biological studies 160605-82-3P

> (modification of medical polymers and polymer base materials for medical use)

ANSWER 18 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1999:439341 HCAPLUS Full-text

DOCUMENT NUMBER: 131:78488

TITLE: Ophthalmic lens comprising acrylic polymers

INVENTOR (S): Leboeuf, Albert R.; Karakelle, Mutlu

Alcon Laboratories, Inc., USA PATENT ASSIGNEE(S):

U.S., 7 pp. SOURCE: CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

APPLICATION NO. PATENT NO. KIND DATE DATE عالم فاعلم من المناسب A 19990713 US 1997-910923 1.9970808 US:5922821 <---

PRIORITY APPLN. INFO.:

US 1996-23623P P 19960809

Entered STN: 19 Jul 1999 ED

High refractive index copolymers suitable for use in ophthalmic lenses, such AB as foldable intraocular lenses, are disclosed. The high refractive index copolymers of the present invention consist essentially of (i) one or more monomers having the structure: CH2=C(X)CO2(CH2)mYAr (X is H or CH3; h is 0 10; Y is nothing, C, S, or NR wherein R is H, CH3, CnH2n+1 (n = 1-10) iso-OC3H7; C6H5, or CH2C6H5; Ar is any aromatic ring which can be unsubstituted or substituted with H, CH3, C2H5, n-C3H7, iso-C3H7, OCH3, C6H11, Cl. Br, C6H5, or CH2C6H5); and (ii) one or more monomers having the structure:CH2=C(X)CO2-((CH2)nO)m-[Ar-Z-Ar']a-O-((CH2)n'O)m'-CCCX'=CH2 wherein: X, X' is independently H or CH3; n, m' are independently 2 or 3; m, m' are: independently 2-25; Ar, Ar' are independently as defined above; a is 1 or 2; and Z is C(CH3)2 or S(:0)2. An intraocular lens was prepared by the polymerization of 2-phenylethyl acrylate 89.6, ethoxylated bisphenol diacrylate A 10.0, o methallyltinuvin P 0.8, and t-Bu peroctoate 1 parts by weight The Tg, tensile strength, and refractive index of the lens was 7.2°, 570 psi, and 1.5575.

229176-53-8P ΙT

CN

(ophthalmic lens comprising acrylic polymers)

229176-53 9 HCAPLUS PN

> 2-Propenoic acid, 2-phenylethyl ester, polymer with  $\alpha, \alpha'$  - [(1-methylethylidene)di-4,1-phenylene]bis[ $\omega$ -[(1- $(2-propenyl) \exp[poly(exy-1,2-ethanediyl)]$  and 2-[5-metnyl-2-[(2-propenyl)]methyl-2-propenyl)oxy]phenyl]-2H-benzotriazole (9CI) (CA INDEX. NAME)

CM 1

CRN .64401-02-1

CMF (C2 H4 O)n (C2 H4 O)n C21 H20 O4

CCI PMS

PAGE 1-A
$$H_2C = CH = \begin{array}{c} O \\ O \\ CH_2 - CH_2 - O \end{array}$$

$$\begin{array}{c} Me \\ Me \\ Me \end{array}$$

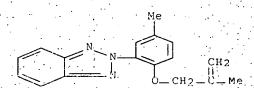
PAGE 1-B

CM , 2

CRN 3530-36-7. CMF C11 H12 O2

CM 3.

CRN 2170-60-7 CMF C17 H17 N3 O



IC ICM C08F220-20

ICS + C08F212-04; G02C007-02

INCL 526286000

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 38

IT Crosslinking agents

Intraocular lenses

Polymerization catalysts

(ophthalmic lens comprising acrylic polymers)

IT 229176-53-8P

(ophthalmic lens comprising acrylic polymers)

REFERENCE COUNT:

THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L24 ANSWER 19 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1999:421855 HCAPLUS Full-text

52

DOCUMENT NUMBER: 131:63498

TITLE: Synthetic resin lens and process for producing the

same

INVENTOR(S): Machida, Katsuichi, Shouji, Masuhiro

PATENT ASSIGNEE(S): Kureha Kagaku Kogyo Kabushiki Kaisha, Japan

SOURCE: PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC: NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9932907	A1	19990701	WO 1998-JP5767	٠.	19981221

W: JP, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FP, GB, GR, IE, IT, LU, MC,

NL, PT, SE

PRIORITY APPLN. INFO.:

JP 1997-353000 A 19971222

ED Entered STN: 08 Jul 1999

The invention relates to a synthetic resin lens which has a high refractive index, a low sp. gr., and excellent transparency, is reduced in the dispersion of light, and is easily molded through cast polymerization without causing the sealing material to dissolve away or be damaged. The synthetic resin lens is characterized by being obtained by polymerizing a monomer mixture comprising [A] a polyfunctional (meth) acrylate having a wrethane bond, [B] divinylbenzene, and [C] a polythiol compound using a radical polymerization initiator.

IT - 328247-04-9P

(synthetic resin lens and process for producing the same).

RN 228247-04-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidere) bis (4,1-phenyleneoxy-2,1-ethanediyl) ester; polymer with 1.3-bis (isocyanatomethyl) benzene, 2,2-bis (3-mercapto-1-oxopropoxy) methyl 1.3-propanediyl bis (3-mercaptopropanoate), diethenylbenzene, 2-hydroxy-3-phenoxypropyl 2-propenoate and 2,2'-[(1-methylethylidene) bis [(2,6-dibromo-4,1-phenylene) oxy]] bis [ethanol] (9CI) (CA INDEX WAME)

CM I

CRN 24448-20-2 CMF C27 H32 Ó6

CM 2

CRN 16969-10-1 CMF C12 H14 O4

:CM: 3

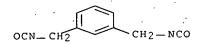
CRN 7575-23-7 CMF C17 H28 O8 S4

:CM

CRN 4162-45-2 CMF C19 H20 Br4 O4

CM 5

3634-83-1 CRN C10 H8 N2 O2 CMF



CM.

1321-74-0 CMF : C10 H10 CCI IDS



IC ICM G02B001-04

ICS C08F290-06; C08F220-34; C08G079-04; C08G018-67

63-7 (Pharmaceuticals)

Section cross-reference(s): 38

Eyeglass lenses

Lenses

(synthetic resin lens and process for producing the same)

228247-03-8P 228247-04-9P 228247-05-0P

[[(synthetic resin lens and process for producing the same)]

23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR REFERENCE COUNT:

THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L24 ANSWER 20 OF 49 HCAPLUS, COPYRIGHT 2007 ACS ON SIN

ACCESSION THUMBER: 11999:378511 HCAPLUS Full-text 131:78495 DOCUMENT NUMBER:

Polymerizable compositions for eyeglass lenses and

TITLE: lenses therefrom

INVENTOR (S): Makino, Shinji; Motonaga, Akira; Morita, Koji

PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan -

Jpn. Kokai Tokkyo Koho, 13 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION

÷	PATENT NO.	KTND	DATE	APPLICATION NO.		DATE
						•
	JP 11158229	A	19990615	JP 1997-328264	• . •	19971128

JP 3524739

B2 20040510

PRIORITY APPLN. INFO.:

JP 1997-328264

19971128

ED Entered STN: 18 Jun 1999

GI

$$R_2$$
 $CH_2 = C - CO(OR^3) \text{ mSCH} 2$ 
 $X_p$ 
 $CH_2 S (R^4C) nCO - C = CH_2$ 

The compns. contain 10-70 parts (A) S-containing urethane-vinyl compds., AΒ prepared from CH2:CHC6H4CH2SR10H (R1 = C1-4 hydrocarbyl) and isocyanates, 30-90 parts (B) (meth)acrylates, and (C) ≥1 radical polymerization initiators selected from radiation-sensitive radical polymn initiators and heat-sensitive radical polymerization initiators at 0.005-5 parts [based on 100 parts (A) + (B)], and (B) contain bis (meth) acrylates I (R2 = H, Me; R3, R4 = C1-4 hydrocarbyl; K = Cl, Br, I; m, n = 1-5) at 10-60 parts based on 100 parts (A) + (B). Also claimed are lenses showing refractive index ≥1.58 manufactured by curing the compns, with active energy and/or heat. The leases have high transparency, heat resistance, chemical resistance, weatherability, surface hardness, impact resistance, and show low yellowing just after curing. A mixture of 2-/4-vinylhenzylthio)ethanol and 2-(3-vinylbenzylthio)ethanol was. treated with Takenate 500 (m -xylylene diisocyanate) in the presence of dibutyltin dilaurate and hydroquinone monomethyl ether at 80° for to give Scontaining urethane vinyl compound A composition containing the vinyl compound 40, p bis (\beta-methacryloyloxyethylthio) xylylene 35, 2,2 bis (4acryloyloxydiethoxyphenyl)propane 15, benzyl methacrylate 10, tri-Et phosphite 0.5, bis(1,2.2,6,6-pentamethyl-4- piperidyl)sebacate 0.5, 2,4,6trimethylbenzovldiphenylphosphine oxide 0.05, and tert-Bu peroxyisobutyrate 0.1 g was irradiated with UV in a mold and heated at 130° for 1 h to give a lens with refractive index 1.598.

IT 228415-10-9P 228415-11-0P 228415-12-1P 228415-13-2P 228415-14-3P 228415-15-4P 228415-16-5P 328415-17-6P 228415-18-7P

(polymerizable compast containing S-containing diacrylates for eyeglass lenses)

RN 228415-10-9 HCAPLUS.

CN 2-Propenoic acid, 2-methyl-, methylenebis(4,1-phenylenethio-2,1-ethanediyl) ester, polymer with bis(isocyanatomethyl)benzene, 2-[[(3-ethenylenethyl)methyl]thio]ethanol, 2-[[(4-ethenylenethyl)thio]ethanol, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyloxy-2,1-ethanediyl) di-2-propenoate and phenylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM

CRN 228415-09-6. CMF: C25 H28 O4 S2 .

PAGE 1-A

PAGE 1-B

\_\_ Ме

CM- 2

CRN 129509-08-6 CMF C11 H14 O S

CM 3

CRN 129509-07-5 CMF C11 H14 O S

CM 4

CRN 56361-55-8 CMF C29 H36 O8

PAGE 1-A

PAGE 1-B

CM 5

CRN 25854-16-4 CMF C10 H8 N2 O2 CCI IDS



CM 6

CRN 2495-37-6 CMF C11 H12 O2

RN 228415-11-0 HCAPLUS
CN 2-Propenoic acid, 2-1

2-Propenoic acid, 2-methyl-, methylenebis(4,1-phenylenethio-2,1-ethanediyl) ester, 2-[4-(1-methyl-1-pnenylethyl)phenoxy]ethyl ester, polymer with 2-[[(3-ethenylphenyl)methyl]thio]ethanol, 2-[(4-ethenylphenyl)methyl]thio]ethanol, 2-isocyanatoethyl 2-methyl-2-propenoate and 2-[4-(1-methyl-1-phenylethyl)phenoxy]ethyl 2-methyl-2-propenoate (9C1) (CA INDEX NAME)

CM :

3.8.1

CRN 228415-09-6 CMF C25 H28 O4 S2

PAGE 1-B

---- Ме

CM 2

CRN 191853-23-3 CMF C21 H24 O3

CM 3

CRN 129509-08-6 CMF C11 H14 O S

CM 4

CRN 129509-07-5 CMF C11 H14 O S

$$HO-CH_2-CH_2-S-CH_2$$
 $CH=CH_2$ 

CRN 30674-80-7 CMF C7 H9 N O3

H2C 0 Me - C - C - C - CH2 - CH2 - NCO

RN 228415-12-1 HCAPLUS

CN 2-Propenoic acid. 2-methyl-, methylenebis (4,1-phenylenethio-2,1-ethanediyl) ester, polymer with bis (isocyanatomethyl) benzene, 2-[[(3-ethenylphenyl)methyl]thio]ethanol, 2-[[(4-ethenylphenyl)methyl]thio]ethanol and phenylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM

CRN 228415-09-6 CMF C25 H28 O4 S2

PAGE 1-B.

--- 14e

CM 2

CRN 129509-08-6 CMF C11 H14 O S

CRN 129509-07-5 CMF C11 H14 O S

CM

CRN 25854-16-4 CMF C10 H8 N2 O2 CCI 1DS

.CM 5

GRN 2495-37-6 CMF C11 H12 C2

RN 228415-13-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methylenebis(4,1-phenylenethic-2,1-thansdiy1) ester, polymer with bis(isocyanatomethyl)benzenc, 2-([(3-ethenylphenyl)methyl]thio]ethanol, 2-([(4-ethenylphenyl)methyl]thio]ethanol and 2-[4-(1-methyl-1-phenylethyl)phenoxylethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 228415-09-6 CMF C25 H28 O4 S2 .

PAGE -1-A

PAGE 1 B

— Ме

CM 2

CRN 129509-08-6 CMF C11 H14 O S

CM 3

CRN 129509-07-5 CMF C11-H14-0-5

CM 4

CRN 80148 08-5 CMF C20 H22 03

CM ·5

CRN 25854-16-4 CMF C10 H8 N2 O2 CCI IDS



2 D1 - CH2- NCO ]

RN 228415-14-3 HCAPLUS

2-Propenoic acid, 2-methyl-, methylenebis(4,1-phenylenethio-2,1-ethanediyl) ester, polymer with bis(isocyanatomethyl)benzene, diethenylbenzene, 2-[[(3-ethenylphenyl)methyl]thio]ethanol, 2-[[(4-ethenylphenyl)methyl]thio]ethanol and 2-hydroxypropyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM .

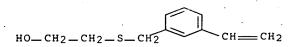
CRN 228415-09-6 CMF C25 H28 O4 52

PAGE 1-8

— Ме

CM 2

CRN 129509-08-6 CMF C11 H14 O S



CM 3

CRN 129509-07-5 CMF C11 H14 O S

$$HO-CH_2-CH_2-S-CH_2$$

$$CH=-CH_2$$

CM 4

CRN 25854-16-4 CMF C10 H8 N2 O2 CCI IDS



CM . 5

CRN 1321-74-0 CMF C10 H10 CCI IDS



CRN 923-26-2 CMF C7 H12 O3

Me\_CH\_CH2\_O\_C\_C\_C\_Me

RN 228415-15-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methylenebis(4,1-phenylenethio-2,1-ethanediyl) ester, polymer with 2-[[(3-ethenylphenyl)methyl]thio]ethan ol, 2-[[(4-ethenylphenyl)methyl]thio]ethanol, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyloxy-2,1-ethanediyl) di-2-propenoate, phenylmethyl 2-methyl-2-propenoate and Takenate 500 (9CI) (CA INDEX NAME)

CM 1

CRN 228415-09-6 CMF C25 H28 O4 S2

PAGE 1.-A

PAGE 1-B

---- M e

CM 2

CRN 129509-08-6 CNF Cll H14 O S

CRN 129509-07-5 CMF C11 H14 O S

CM 4

CRN 59966-87-9 CMF Unspecified CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM S

CRN 56361-55-8 CMF C29 H36 O8

CM. E

CRN 2495-37-6 CMF C11 H12 O2

PAGE 1-B

RN 228415-16-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methylenebis(4,1-phenylenethio-2,1-ethanediyl) ester, polymer with 2-[[(3-ethenylphenyl)methyl]thio]ethan ol, 2-[[(4-ethenylphenyl)methyl]thio]ethanol, phenylmethyl 2-methyl-2-propenoate and Takenate 500 (9CI) (CA INDEX NAME)

CM 1

CRN 228415-09-6 CMF C25 H28 O4 S2

PAGE 1-B

--- Ne

CM.

CRN 129509-08-6 CMF Cli H14 C S

CM :

CPN | 129509 07-5; CMF | Gld :H14 O S :

CRN 59966-87-9

CMF Unspecified

CCI MAN

#### \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 5

CRN 2495-37-6 CMF C11 H12 O2

H2C 0 Me\_C\_C\_C\_CH2-Ph

RN 228415-17-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methylenebis(4,1-phenylenethio-2,1-ethanediyl) ester, polymer with 2-[[(3-ethenylphenyl)methyl]thio]ethan.

ol, 2-[[(4-ethenylphenyl)methyl]thio]ethanol, 2-[4-(1-methyl-1-phenylethyl)phenoxy]ethyl 2-propenoate and Takenate 500 (2CI) (CA INDEX NAME)

CM

CRN 228415-09-6 CMF C25 H28 O1 S2

PAGE 1-B

---- M∈

CM 2

CRN 129509-08-6. CMF C11 H14 0 S

CRN 129509-07-5 CMF C11 H14 O S

CM 4

CRN 86148-08-5 CMF C20 H22 Q3

CM 5

CRN 59966-87-9 CMF Unspecified CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 228415-18-7 HCAPIJUS

CN 2-Propenoic acid, 2-methyl-: methylenebis(4,)-phenylenethio-2,1-ethanediyl) ester, polymer with diethenylbenzene, 2-[[(3-ethenylphenyl)methyl]thio|ethanol, 2-[[(4-ethenylphenyl)methyl]thio|ethanol, 2-hydroxypropyl 2-methyl-2-propencate and Takenate 500 (9CI) (CA INDEX NAME)

CM 3

CRN 228415-09-6 CMF C25 H28 04 S2 PAGE 1-A

H2C O O CH2

Me-C-C-O-CH2-CH2-S  $S-CH_2-CH_2-O-C-C$ 

PAGE 1-B

— Ме

CM 2

CRN 129509-08-6 CMF C11 H14 O S

. CM 3.

CPN 129509-07-5. CMF C11 H14 O S

.CM

CRN 59966-87-9 CMF Unspecified

CCI MAN

\* \*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM S

CRN 1321-74-0 CMF C10 H10 CCI IDS



# 2 | D1 - CH == CH2 |

- CM

CRN 923-26-2 CMF. C7 H12 O3

Me-CH-CH2-0-C-U-Me

IC ICM C08F212-14

ICS B29D011-00; C08F220-38; C08K005-3435; C08K005-524; C08L025-14; C08L033-14: G02B001-04; G02C007-02; B29K081-00.

CC : 63-7. (Pharmaceuticals)

Section cross-reference(s): 38, 73

IT Eyeglass lenses

(polymerizable compns. containing S-containing diacrylates for eyeglass lenses)

TT - 228415-10-9P 228415-11-0P 228415-12-1P

228415-13-2P 228415-14-3P 228415-15-4P

223415-16-5P 228415-17-6P 228415-18-7P :

(polymerizable compns: containing S containing diacrylates for eyeglass ·lenses)

L24 ANSWER 21 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN.

ACCESSION NUMBER: 1999:126944 HCAPLUS Full-text

DOCUMENT NUMBER: 130:168799

(Meth) acrylic polymers for ophthalmic lenses TITLE:

INVENTOR (S): Leboeuf, Albert R.; Karakelle; Mutlu

PATENT ASSIGNEE (S): Alcon Laboratories, Inc., USA

PCT Int. Apple, 18 pp. ... ; ಆಶಿಪ್ರಾಂತ

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WC 0907756	A1	19990218	WO 1997 US13971	19970812

W: AU, CA, CN, JP, MX

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,

# 10/549,696

	CA 2295809		A1 · ·	19990218	CA 1997-2295809	19970812
• • •	AU 9740568.		A	19990301	AU 1997-40568	19970812
÷	AU 727484 EP 1003795		B2 A1	20001214 20000531	EP 1997-938179	19970812
				20040218 , ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC,
	CN 1259965	,	<b>A</b>	20000712	CN 1997-182306	19970812
••	JP 20015127	54	T	20010828	JP 2000-506253	19970812
•	AT 259839		· T .	20040315	< AT 1997-938179	19970812
	PT 1003795		T	20040630	PT 1997-938179	19970812
	ES 2212124		Т3	20040716	ES 1997-938179	19970812
: .	MX 20000152	6	A	20010827	MX 2000-1526	20000211
PRIO	RITY APPLN.	INFO.:			EP 1997-938179	A 19970812
					< WO 1997-US13971	A 19970812

ED Entered STN: 26 Feb 1999

Polymers with high refractive index and suitable for use in ophthalmic lenses, such as foldable intraocular lenses, consist essentially of (i) one or more monomers having structure CH2:C(X)C(O)O(CH2)mYAr [X = H; CH3; m = 0-10; Y = nothing, O, S, NR; R = H, CH3, CnH2n+1, isopropoxy, Ph, CH2C6H5; n = 1-10; Ar = aromatic ring (substituted with H, CH3; C2H5, n-C3H7, iso-C3H7, OCH3; C6H11, Cl, Br, C6H5, or CH2C6H5)] and (ii) one or more monomers having structure CH2:CH(X)C(O)O[(CH2)nO](ArZAr')aO[(CH2)n'O]m'C(O)CH(X'):CH2 [X, X' = H, CH3; n, n' = 2, 3; m, m' = 2-25; Ar, Ar' = (substituted) aromatic ring; a = 1, 2; Z = C(CH3)2, SO2].

IT. 220416-42-29

((meth) acrylic polymers for ophthalmic lenses)

RN 220416-42-2 HCAPLUS

2-Propenoic acid, 2-phenylethyl ester, polymer with u,u'-((1-methylethylidene)di-4,1-phenylene)bis(w-((1omc-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM

CRN 64401-02-1

CEF (C2 H4 Q)n (C2 H4 O)n C21 H20 O4

CCI PMS.

$$H_2C = CH - CH_2 - CH$$

PAGE 1-B

CM.

CRN 3530-36-7 CMF. C11 H12 O2

Ph-CH2-CH2-O-U-CH-CH2

IC ICM C08F220-30

ICS 302B001-04; C08F220-38; C08F220-34; C08F220-18:

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 38, 63

IT Intraocular lenses

((meth)acrylic polymers for ophthalmic lenses)

220416-42-2P

((meth)acrylic polymers for ophthalmic lenses)

REFERENCE COUNT: 2

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 22 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1998:712683 HCAPLUS Full text

DOCUMENT NUMBER! ...

Polymerizable compositions for eyeglass Tenses
Shijo, Masayuki; Matsumoto, Masamichi; Seki
Michiko; Abe, Osamu TITLE:

INVENTOR (S)

PATENT ASSIGNEE(S): Nikon Corp., Japan

SOURCE: Jon Kokai Tokkyo Koho, 7 pp.:

GODEN: JKXXAF

Patent DOCUMENT TYPE: LANGUAGE: Japanese

FAMILY ACC: NUM: COUNT: 1
PATENT: INFORMATION:

PATENT INFORMATION:

PATENT NO. KIND	DATE	APPLICATION NO. DATE
		العرب ما بالكاف ما أناكل المعافي بعد إلياب القائم التأثير الأناف المتراسع عربي عالم الم
JP 10292015 A	19981104	JP 1997-102240 19970418
		<b>~~</b> -

JP 1997-102240. 19970418 PRIORITY APPLN. INFO.:

Entered STN: 10 Nov 1998

The title compns. contain (A) materials from compds. having ≥2 polymerizable double bonds in a mol., (B) materials from compds having ≥2 SH groups in a

mol., and (C) reactive diluents of compds. having 1 polymerizable double bond in a mol., wherein the molar ratio of (double bonds of A)/(SH groups of B) is 1.5-20 and the molar ratio of (double bonds of A + SH groups of B)/(double bonds of C) is 0.1-20. Bisphenol A diacrylate 27, pentaerythrithiol 8, and Ph methacrylate 65 weight parts were polymerized in the presence of 2,4,6-trimethylbenzoyldiphenylphosphine oxide and Perbutyl O and cured in a mold by UV irradiation to give lenses refractive index 1.57, Abbe's number 37.7, sp. gr. 1.21, and good impact and heat resistance and dyeability.

IT 216439-70-2P 216439-71-3P 216439-72-4P 216439-73-5P 216439-74-6P 216439-75-7P

(polymerizable compns. containing (meth) acrylates and thiols for eyeglass lenses with high refractive index, impact and heat resistance, and dyeability)

RN 216439-70-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, phenyl ester, polymer with 2,2-bis(hydroxymethyl)-1,3-propanediol and (1-methylethylidene)di-4,1-phenylene di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 4491-03-6 CMF C21 H20 O4

CM 2

CRN 2177-70-0 CMF C10 H10:02

CM 3

CRN 115-77-5 CMF C5 H12 O4

RN 216439-71-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, phenylmethyl ester, polymer with 2,2-bis[[(mercaptoacetyl)oxy]methyl]-1,3-propanediyl bis(mercaptoacetate) and (1-methylethylidene)di-4,1-phenylene di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 10193-99-4 CMF C13 H20 O8 S4

CM 2

CRN 4491-03-6 CMF C21 H20 O4

CM 3

CRN 2455 37 5 CMF C11 H12 02

RN 216439-72-4 HCAPLUS

CN 2-Propenoic acid, (1-mothylethylidene)di-4,1-phenylene ester, polymen with 1-chloro-4-ethenylbenzene and 2,2'-thiobis[ethanethiol] (9GI) (CA INDEX NAME)

CM :

CRN 4491-03-6

CMF C21 H20 O4

CM 2

CRN 3570-55-6 CMF C4 H10 S3

HS-CH2-CH2-S-CH2-CH2-SH

CM 3

CRN 1073-67-2 CMF C8 H7 Cl

RN 216439-73-5 HCAPLUS.

CN 2-Propenoic acid, 2-methyl-, phenyl ester, polymer with 2,2-bis(hydroxymethyl)-1,3-propagadiol and α,α'- (sulfonyldi-4,1-phenylene)bis[ω-1(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] (901) (CALINDEY NAME)

CM 1

.CRN 69531-53-5

CMF (C2 H4 O)n (C2 H4 O)n C18 H14 O6 S

CCT PMS

PAGE 1-A

$$O = CH_2 - CH_2 - CH_2 - O = CH_2 - CH_$$

PAGE 1-B

$$-CH_2- - - - C-CH - - CH_2$$

CM

CRN 2177-70-0. CME C10 H10 O2

CM

CRN 115-77-5 CMF C5 H12 O4

216439-74-6 HCAPLUS RN. 2-Propenoic acid, 2-methyl-, phenylmethyl ester, polymer with 2.2-bis[[(mercaptoacetyl)oxy]methyl]-1,3-propanediyl bis (mercaptoacetate) and  $\alpha, \alpha'$  - (sulforyldi-4,1) phenylene) bis [w-[(1-oxo-2-propenyl) cxy] poly(oxy-1,2-ethanediyl)] TOCI) (CA INDEX NAME)

CM.

CRN 69531-53-9

CMF (C2 H4 O)n (C2 H4 O)n C18 H14 O6 S

CCI PMS.

PAGE 1-A
$$H_2C = CH - C - O - CH_2 - CH_2 - O - D$$

PAGE 1-B

CM 2

CRN 10193-99-4 CMF C13 H20 O8 S4

CM .

CRN 2495-37-6 CMF C11 H12 O2

RN 216439-75-7 HCAPLUS
CN Ethanethiol, 2,2'-thiobis-, polymer with 1-chloro-4-ethenylbenzene and α,α'-(sulfonyldi-4,1-phenylene)bis[ω-1(1-οχο 2-) propenyl)oxy]poly(oxy-1,2-ethanediyl)] (9C1) (CA INDEX NAME)

CRN 69531-53-9

(C2 H4 O)n (C2 H4 O)n C18 H14 O6 S CMF

CCI PMS

PAGE 1-A

PAGE 1-B

CM .2

CRN 3570-55-6 CMF C4 H10 S3

HS-- CH2-- CH2-- S-- CH2-- CH2-- SH

CM

CAN 1073-67-2 CMF C8 H7 C1

IC 1CM C08G075-04 ICS G02B001-04; G02C007-02; C08L081-02

CC 63-7 (Pharmaceviicals)

Section cross-reference(s): 37, 73

Eyeglass lenses

(polymerizable compns. containing (meth)acrylates and thiols for eyeglass lenses with high refractive index, impact and heat resistance, and dyeability)

IT 216439-70-2P 216439-71-3P 216439-72-4P 216439-73-5P 216439-74-6P 216439-75-7P

> (polymerizable compns. containing (meth) acrylates and thiols for eyeglass lenses with high refractive index, impact and heat resistance, and dyeability)

HCAPLUS COPYRIGHT 2007 ACS on STN L24 ANSWER 23 OF 49

ACCESSION NUMBER:

1998:555876 HCAPLUS Full-text

DOCUMENT NUMBER:

129:217681

TITLE:

Acrylic resin eyeglass lenses containing

absorbents for near IR rays

INVENTOR (S):

Machida, Katsuichi; Okihara, Takeo; Shouji,

Masuhiro; Ito, Yoshinobu; Atano, Koki

PATENT ASSIGNEE(S):

Kureha Chemical Industry Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese.

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT NO.		KIND	DATE	AP	PLICATION NO.		DATE
JP	10228004	77	A	19980825	JP	1997-28772		19970213
	•					<	•	
PRIORITY	APPLN. IN	FO:			JP	1997-28772		19970213

Entered STN: 01 Sep 1998 EO

The lenses comprise 100 parts copolymers obtained from 2-60% PO(OH) nR3-n [I; R ΆB = CH2:CXCO2(C2H4O) $m_1$ ,  $X = H_1$  Me; m = 0-5; n = 1, 2] and 40-98% components and 11.0-50 parts dispersed ionic metal components containing mainly Cu ion: Thus, a monomer mixture containing I (X = Me; m = n = 1) 8.82, I (X = Me; m = 1; n = 1)2) 5.18, Me methacrylate 18:0, 2,2-bis(4-methacryloxyethoxyphenyl)propane 43.0, phenoxyethyl methacrylate 19.0, and 2,4-diphenyl-4-methyl-1-pencene 0.3 part was mixed with 0.1 part 2-(2'-hydroxy-5'-octylphenyl) benzotriazole and 6.0 parts CuODs and polymerized in the presence of a polymerized to give a blue molding with water absorption 2.2% (25°, 24 h) and good light absorption at 700-1000 nm.

212620-04-79; Bis(2-methacrylcyloxyethyl) phosphate-2,2-bis(4methacryloxyethoxyphenvl)propane-2,4-diphenyl-4-methyl-1-pentenemothyl methacrylate-mond(2-methacryloyloxyethyl) phosphate copolymer (accylic resin eyeqlass lenses containing absorbants for near tR rays)

212620-04-7 HCAPLUS

2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4.1-phenyleneoxy-CN 2,1-ethanedayl) ester, polymer with 1,1'-(1,1-dimethyl-3-methylene-1,3-) propanediy1)bis[benzene], methyl 2-methyl-2-propenoate, phosphinicobia (oxy-2,1 ethanediyl) bis (2-methyl-2-propencate) and 2-(phosphonooxy) ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CRN 32435 45-4 CMF C12 H19 O8 P

CRN 24599-21-1 CMF C6 H11 O6 P

$$\begin{array}{c} \text{O} \quad \text{CH}_2 \\ \text{II}_2 \text{O}_3 \, \text{PC} - \text{CH}_2 - \text{CH}_2 - \text{O} - \text{C} - \text{C} - \text{Me} \end{array}$$

CM 3

CRN 24448-20-2 CMF C27 H32 C6

$$^{\text{H}_2\text{C}}$$
 O  $^{\text{C}}$   $^{\text{C}$ 

CM 4

CRN 6362-80-7 CMF C18 H20

CM .

CRN 80-62-6 CMF C5 H8 O2 H2C O Me-C-C-OMe

IC ICM G02C007-02

ICS C08F030-02; G02B001-04; G02C007-10; C09K003-00

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 63

IT Eyeglass lenses

(acrylic resin eyeglass lenses containing absorbents for near IR rays)

IT 212620-04-7P, Bis(2-methacryloyloxyethyl) phosphate-2,2-bis(4-methacryloxyethoxyphenyl)propane-2,4-diphenyl-4-methyl-1-pentene-methyl methacrylate-mono(2-methacryloyloxyethyl) phosphate copolymer (acrylic resin eyeglass lenses containing absorbents for near IR rays)

L24 ANSWER 24 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1998:239582 HCAPLUS Full-text

DOCUMENT NUMBER: 129:19736.

TITLE: Polymerizable photochromic compositions and

photochromic lenses for ocular disease patients

INVENTOR(S): Shimonishizono, Katsushi, Itonaga, Kazumasa

PATENT ASSIGNEE(S): Tokuyama Soda Co., Ltd., Japan; Tokai Kogaku K. K.

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
JP 10101752	A 19980421	JP 1996-261780	19961002
JP 3681481	B2 20050610		
PRIORITY APPLN. INFO.:		JP 1996-261780	19961002

ED Entered STN: 27 Apr 1998.

The compns. contain (A) polyfunctional (meth) acrylate monomers 100, (B) photochromic compds. 0.001-10; (C) epoxy compds. 0.1-30, and (D) dyes or pigments 0.001-1 weight part. The photochromic lenses comprise the above compns. The lenses show good antigiare and light-control properties indoors and outdoors, and are useful for eyeglasses for patients with retinal or corneal disorders, lentectomized patients, etc. A composition containing tetraethylene glycol dimethacrylate 60, triethylene glycol dimethacrylate 15. α-methylstyrene 10, α-styrene dimer 1, and glycidyl methacrylate 14 weight parts was stirred at room temperature for 2 h, mixed with spire [bicyclo [3.3.1] nonane 9,2'-2H-benzo[h]chromene] 0.05, N-cyanomethyl-6,7-dihydro-2-(pmethoxyphenyl)-4-methylspiro[5,8-banzo[b]thiophenedicarboximido-7,2tricyclo[3.3.1.1]decane] 0.07, 6'-fluoro-1',7'-dimethyl-6''morpholinodispiro[cyclohexane-1,3'-(3H) indole-2'-(1'H),3''- (3H) naphtho[3,2a][1,4]oxazine] 0.05, PS Yellow S-K 0.03, PS Red G 0.002, PS Blue RP 0.001, and tert-Bu peroxy-2-ethylhexanoate 1 weight part, and cast-molded to give a photochromic plate.

207602-80-0P, Bisphenol A monogively ether methacrylate-α-methylstyrene-α-methylstyrene dimer-tetraethylene glycol dimethacrylate-triethylene glycol dimethacrylate copolymer

### 10/549.696

(polymerizable photochromic compns. containing polyfunctional acrylates, epoxy compds., and dyes and photochromic eyeglass lenses therefrom for ocular disease patients)

RN 207602-80-0 HCAPLUS .

2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester, polymer with (1-methylethenyl)benzene, (1-methylethenyl)benzene dimer, (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bis(2-methyl-2-propenoate) and oxybis(2,1-ethanediyloxy-2,1-ethanediyl) bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM · . 1

CRN 1565-94-2 CMF C29 H36 O8

H<sub>2</sub>C O OH OH OH OH CH<sub>2</sub>CH CH

PAGE 1-B

О СН<sub>2</sub> : \_\_\_\_\_\_\_ Ме:

CM · ...2

GRN 109-17-1 . CMF C16 H26 O7

PAGE 1-B

— Ме

.CM 3

CRN 109-16-0 CMF C14 H22 O6

CM · 4

CRN. 98-83-9 CMF C9 H10

 $CH_2$ Ph=C-Me

CM !

CRN 6144-04-3 CMF (C9 H10)2 CCI PMS

CM 6

CRN 98-83-9 CMF C9 H10

IC ICM COSF399-00

TCS C08F220-20; C08F220-32; C08F290-06; C09K009-02; G02B001-04; G02C007-02

CC : 63-7. (Pharmaceuticals).

Section cross-reference(s): 38, 74

11 Hyeglass lenses

Photochcomic materials

(polymerizable photochromic compns: containing polyfunctional activities; epoxy compds., and dyes and photochromic eyeslass lenses therefrom for ocular disease patients)

207602-79-7P, Glycidyl methacrylate-α-methylstyrene-α-methylstyrene dimer-tetraethylene glycol dimethacrylate-triethylene glycol dimethacrylate copolymer 207602-80-0P. Bisphenol A monoglycidyl ether methacrylate-α-methylstyrene-α-methylstyrene dimer-tetraethylene glycol dimethacrylate-triethylene glycol dimethacrylate copolymer 207602-81-1P, Glycidyl methacrylate-α-methylstyrene-α-methylstyrene

#### 10/549,696

dimer-tetraethylene glycol dimethacrylate opolymer (polymerizable photochromic compns. containing polyfunctional acrylates, epoxy compds, and dyes and photochromic eyeglass lenses therefrom for ocular disease patients)

L24 ANSWER 25 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN 1997:465242 HCAPLUS Full-text

ACCESSION NUMBER:

DOCUMENT NUMBER:

127:81901

TITLE:

Transparent organic photochromic and

non-photochromic polymeric materials with high

refractive index

INVENTOR (S):

Florent, Frederic H.; Henry, David; Lafosse,

Xavier

PATENT ASSIGNEE(S):

Corning Incorporated, USA; Florent, Frederic H.;

Henry, David; Lafosse, Xavier

SOURCE:

PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE: ...

English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ----A1 WO 9721122: 5 19970612 WO 1996-US18668 W: AU, BP, CA, CN, JP, KR, MX, RU, US RW: AT, BE, CH, LE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT. SE FR 2741959 A1 19970606 19951205 FR 1995-14343 B1 19980213 FR 2741959 AU 9710573 AU: 1997-10573 19961121 Α. 19970627 <--19980930 EP 1996-941425 19961121 EP 866987 B1 20021002 R: DE, ES, A 19961121 19981230 CN 1996-198673 CN 1203672 <---ES 2134359 ··· T3 20030416 ES 1996-941425 13961121 <---US 1999-51025 20010424 19591112 US 6221284 B1 FR 1995-14343 A 19951205 PRIORITY APPLN. INFO.: . "Lange US 1996-11423P . . . P. 19960208

Entered STN: 25 Jul 1997 ED

The materials, useful for ophthalmic lenses and automobile or building AB glazings, have n >1.55, and are free of optical distortions. The materials optionally contain a photochromic coloring agent, a dye, a chain transfer agent, a polymerization initiator or catalyst and a hindered amine light stabilizer. In particular, a such material comprises a dimethacrylate of bisphenol A ethoxylate or propoxylate,  $(\alpha-methyl)$  styrene, di( $\alpha$ -... methyl)vinylbenzene, (meth)acrylate esters of C4-16 alkyl, alkylaryl or

<---US 1996-23330P

<--WO 1996-US18668 P. 19960731

W 19961121

## 10/549,696

(CH2CH2O) nR type (n = 1-10; R = Me Et), and optionally photochromic colorant chosen from spirooxazines, spiropyrans and chromenes.

IT 191721-18-3, Diacryl 121-divinylbenzene-2-ethylhexyl

methacrylate-styrene copolymer 191721-19-4, Butyl

methacrylate-Diacryl 121-divinylbenzene-styrene copolymer

191721-22-9, Diacryl 121-divinylbenzene-ethyl triglycol

methacrylate-styrene copolymer

(transparent organic photochromic and non-photochromic polymeric materials with high refractive index)

RN 191721-18-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with diethenylbenzene, ethenylbenzene and 2-ethylhexyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1.

CRN 56744-60-6 CMF C31 H40 O8

PAGE 1 - A

$$H_2C = 0$$
 $Me = C = 0 = CH_2 = CH_2 = C = CH_2 = CH_2 = 0$ 
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 $Me = CH_2 = 0$ 
 $Me = CH_2 = CH_2$ 

PAGE 1-B

CM 2

CRN 1321-74-0 CMF C10 H10 CCT IDS



CRN 688-84-6 CMF C12 H22 O2

CM . 4

CRN 100-42-5 CMF C8 H8

 $H_2C == CH - Ph$ 

RN 191721-19-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with butyl 2-methyl-2-propenoate, diethenylbenzene and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 56744-50-6 CMF C31 H40 O8

H2C 0 Me C C 0 CH2 CH2 0 CH2 CH2 0 Me O CH2

PAGE 1-8

CM

CRN 1321-74-0

CMF C10 H10 CCI IDS



2 D1-CH=CH2

CM 3

CRN 100-42-5 CMF C8 H8

H.2 C ==== CH --- Ph

CM 4

CRN 97-88-1 CMF C8 H14 O2

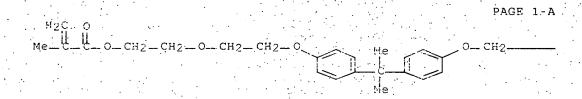
0 CH2 1 n BuO-C-C-Me

RN 191721-22-9 HCAPLUS

2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) ester, polymer with diethenylbenzene, ethenylbenzene and 2 [2-(2-ethoxyethoxy)ethoxy]ethyl 2-methyl-2-propenoate (9CI) (CA-INDEX NAME)

CM

CRN 56744-60-6 CMF C21 H40 O8



PAGE 1-B

CM:

CRN 39670-09-2 CMF C12 H22 O5

CRN 1321-74-0 CMF C10 H10 CCI IDS



CRN 100-42-5 CMF C8 H8

entger<del>aaa</del> OH---£jiro

- ICM G02B005-23
- ICS C09F012-24 CC 25-4 (Chemistry of Synthetic High Polymers) Section cross-reference(s): 63
- IT Eyeglasses Lanses

Refractive index

Transparent materials
(transparent organic photochromic and non-

photochromic polymeric materials with high refractive index)

IT 191721-18-3, Diacryl 121-divinylbenzene-2-ethylhexyl methacrylate-styrene copolymer 191721-19-4, Butyl

methacrylate-Diacryl 121-divinylbenzene-styrene copolymer 191721-22-9, Diacryl 121-divinylbenzene-ethyl triglycol

methacrylate-styrene copolymer

(transparent organic photochromic and non-photochromic polymeric materials with high refractive index)

L24 ANSWER 26 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:286223 HCAPLUS Full-text

DOCUMENT NUMBER: 126:268541

TITLE: Contact lenses with hydrophilic crosslinkers INVENTOR(S): Nunez, Ivan; Molock, Frank F.; Elliott, Laura

PATENT ASSIGNEE(S): Johnson & Johnson Vision Products, Inc., USA

SOURCE: Can. Pat. Appl., 65 pp.

CODEN: CPXXEB

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
CA 2178466	A1 19961208	CA 1996-2178466	19960606
US 5563183	A 19961008	3 US 1995-484134	19950607
US 5565539	A 19961015	5 US-1995-484133	19950607
US 5654350	A 19970805	5 US 1995-484132	19950607
BP 9602701	A 19980422	BR 1996-2701	19960607
RIORITY APPLN. INFO.:		US 1995-484132	A 19950607
		US 1995-484133	A 19950607
		US 1995 484194.	A 19950607

ED . Entered STN: 05 May 1997

AB Hydrophilic contact lenses made using a crosslinking agent:

AX(OC(C):R(C(O)):10X]nA where R contains one or more syclic or bicyclic releties. Y is linear or branched alkyl or alkenyl, optionally substituted, and A is acrylate, methacrylate, vinylbenzoyloxy or vinylphenoxy, exhibit seperior hydrophilicity, oxygen transmissivity, and plays properties. E.g. succinated diglycidyl bisphenol A dimethacrylate was prepared

IT 188817-64-3F 138817-65-4P

(contact lenses with hydrophilic crosslinkers)

RN 183817 61 3 HCAPLUS

CN 2 Propendic acid, 2-methyl-, (1-methylethylideas)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester, polymer with dihydro-2,5-furandione (9CI) (CA INDEX NAME)

CM = 1

CRN 1565-94-2 CMF C29 H36 O8

PAGE 1-B

CM 2

CRN 108-30-5 CMF C4 H4 O3

RN 188817-65-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis[4,1-phenyleneoxy/2-hydroxy-3,1-propanediyl)] ester, polymer with 3,3,4,4,5,5-hexsfluoredihydro-2H-pyran-2,6(3H)-dione (9CT) (CA INDEX NAME)

CM 1

CPN 1565-94-5-7 CMF C29 H36 98

О СН<sub>2</sub> \_\_\_\_\_\_С\_\_\_Ме

CM 2

CRN 376-68-1 CMF C5 F6 O3

 $\bigcap_{F} \bigcap_{F} \bigcap_{F} \bigcap_{F}$ 

IC ICM C08F020-28

ICS G02B001-04

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 35

IT Contact lenses

Crosslinking agents

(contact lenses with hydrophilic crosslinkers)

IT 25721-76-0P, Polyethylene glycol dimethacrylate 25852-47-5P, Polyethylene glycol dimethacrylate 183668-38-4P 188817-64-3P

188817-65-4P (contact lenses with hydrophilic crosslinkers)

L24 ANSWER 27 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:664688 HCAPLUS Full-text

DOCUMENT NUMBER: 125:339120

TITLE: Method for making photochromic ophthalmic lenses

INVENTOR(S): Tardicu, Cano, Jean-Paul; Weber, Steven; Tardicu, Fascale,

Lelard, Nathalie

PATENT ASSIGNEE(S): Escilor International - Compagnic Generale

D'Optique, Fr.

SOURCE: PCT Tot. Appl., 34 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

French

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION: 1/2

PATE	ON TW		KIND	DATE		APPLICA	TION NO	).	ָלָב <u>ּי</u>	YTE
WO 96	527483		Al	1,99609	12	WO 1996	-FR323		1.9	3260301
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1	N: AL	AM, AT,	AU, Ag,	вв. в	G, BR,	EY, CA	, CH, C	CN, CZ,	DE,	DK.
	EE,	ES, FI,	GB, GE,	HU, I	S, JP,	KE, KG	, KP, I	KR, KZ,	ĽK,	LR,
	L.C.	ÍT, LU,	LV, MD,	MG, M	K, MN.	MW, MX	, NO, 1	IZ, PL,	PT,	RO,
		SD, SE,			•					
. I	RW: KE,							ES, FI,	FR,	GB,
	GB	TE TO	THE MC	NII P	T. SE.	BF BJ	CF. C	ra i eri.	C'M.	CA

	GN,	ЙL		•	• • •	
FR	2731226		A1	19960906	FR 1995-2520	19950303
					<	
FR	2731226	· · · · .	B1	19970425		
, AU	9649473		A	19960923	AU 1996-49473	19960301
•					. <	••
, AU	695576	*	B2	19980813		•
BR	9607467		Α	19971223	BR 1996-7467	19960301
					<	
EP	813471		A1	19971229	EP 1996-905894	19960301
		•			<	
EP.	813471		В1			
• •	R: AT,	BE, CH,	DE,	DK, ES, FR,	GB, GR, IT, LI, LU	, NL, SE, MC,
	PT,	IE, FI				
JP	11501959	<del>)</del>	Τ.	19990216	JP 1996-526651	19960301
•					<	
JP	3507502		B2	20040315	•	
PRIORITY	APPLN.	INFO.:			FR 1995-2520	A 19950303
					<	
	•				WO 1996-FR323	W 19960301
		•		· ·		

ED Entered STN: 11 Nov 1996

AB A method wherein (a) a polymerizable composition consisting of transparent organic glass is fed into a mold; (b) the composition is polymerized under such conditions that the resulting transparent organic glass substrate has at least one thin surface layer polymerized with a degree of completion and/or crosslinking that is substantially lower than in the rest of the substrate; and optionally (c) subjecting the substrate to thermal stress relief annealing. The method is useful for producing finished or semi-finished ophthalmic articles, particularly photochromic ophthalmic articles. Tetraethoxy-bisphenol A-dimethacrylate 98, 3-methyl-2-butene-1-ol 2%, and Darcur 4265 0:15 part were photopolymd, and coated with a composition containing cellulose acetobutyrate 18, spirooxazine 2, and methylacetone 80% to obtain a photochromic lens with high optical d.

IT 182964-71-2P

(method for making photochromic ophthalmic lenses)

RN 182964-71-2 HCAPLUS.

CN 2-Buten-1-ol, 3-methyl-, polymer with α,α-[(1methylethylidene)di-4,1-phenylene)bis[ω-[(2-methyl-1-oxo-2-)
propenyl)oxylpoly(oxy-1,2 ethanediyl)] (9CI) (CA INDEX NAME)

cm i

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

CCI PMS

$$H_2C$$
  $O$   $H_2 - CH_2 - CH_2$ 

PAGE 1-B

CM ·

CRN 556-82-1 CMF, C5 H10 O

Me 2 C == CH - CF 2 - OH

IC ICM B29C039-42

ICS B29C035-02; B29C039-00;

63-7 (Pharmaceuticals)

Section cross-reference(s): 38

Lenses

(contact, method for making photochromic ophthalmic lenses)

Lenses

(eyeglass, photochromic, method for making

photochromic ophthalmic lenses)

182964-71-2P

(method for making photochromic ophthalmic lenses)

L24 ANSWER 28 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN-

ACCESSION NUMBER: 1996:643892 HCAPLUS Full-text

DOCUMENT NUMBER: 125:285001

TITLE: Photochromic ophthalmic lenses with high refractive indexes comprising ethoxylated

bisphenol A

Henry, David; Vial, Jacques Jean; Chan, You Ping; INVENTOR(S):

Meyrueix, Remi

PATENT ASSIGNEE (S) Corning Incorporated, USA

SOURCE : Fr. Demande, 17 pp.

CODEN: FRXXBL.

DOCUMENT TYPE: Patent L'ANGUAGE : French

11 FAMILY ACC. NUM. COUNT:

PATERT INFORMATION:

PATENT NO.	KINI	DATE	APPLICATION NO.	DATE
FR 2728576	A1	19960628	FR 1994-15495	19941222
CA 2205349	A1	19960627	CA 1995-2205349	19951109
EP 799431	<b>A</b> 1	19971008	< EP 1995-942849	19951109
EP 799431	ъ1	19990623		

10/549,696

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• • •	JP	105,10	872		•	τ		19981020	JP	1995-519792	•	19951109
•									• . • •	<		
	ES	21351	111			Т3		19991016	ES	1995-942849		19951109
								. •		· <		
	IN	19433	32		• •	A1		20041009	IN	1995-DE2114		19951117
				•				•		<		
	US	57635	511			Α	٠.	19980609	US	1997-817560		19970421
										<		
PRIO	RIT	C APPI	Ν.	INFO	. :				FR	1994-15495	A	19941222
	•							•		· <		
					•				MO	1995-US14585	W	19951109

ED Entered STN: 01 Nov 1996

AB Photochromic ophthalmic lenses with high refractive indexes comprising choxylated bisphenol A and a coloring agent chosen from spiroxazine, spiropyranes, and chromenes are disclosed. Polycaprolactone diol 0.08, hydroxyethyl methacrylate 0.16 mol, and di-Bu stannous laurate 0.02% were heated under N at 50° for half an h followed by addition of 0.16 mol of isophorone diisocyanate to obtain a polyprethane functionalized dimethacrylate. A photochromic lens was prepared comprising Diacryl 101 90 above polymer 10, a photochromic color 0.2, and AIBN 0.5 parts.

IT 182552-45-0P 182552-46-1P

(photochromic ophthalmic lenses with high refractive indexes comprising ethoxylated bisphenol A).

RN 182552-45-0 HCAPLUS

2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-

2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with

1,4-bis(1-isocyanato-1-methylethyl)benzene and 2-hydroxyethyl

2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CN

CRN 56744-60-6 CMF C31 H40 O8

PAGE 1-A

PAGE 1-R

CM 2

CRN 2778-41-8

CMF C14 H16 N2 O2

CM 3

CRN 868-77-9 CMF C6 H10 03.

$$H_{2C}$$
 C  $H_{2}$   $H$ 

RN 182552-46-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyloxy-2,1-ethanediyloxy-2,1-ethanediyloxy)]bis[ethanoll (9CI) (CA INDEX NAME)

CM 3

CRN 71816-06-3 CMF C31 H48-010

··PACE 1-B

CRN 56744-60-6 CMF C31 H40 O8

PAGE 1-A

PAGE 1-B

CM

CRN-4098-71-9 CMF C12 H18 N2 O2

CM

868-77-9 CMF C6 H10 03

ICM C08F283-00 ICS C08L075-16; C08U003-20; C09K009-00; G02B001-04

C08F283-00, C08F220-20 ICI

63-7 (Pharmaceuticals) CĊ

Section cross-reference(s): 38

IT Lenses

(contact, photochromic ophthalmic lenses with high refractive indexes comprising ethoxylated bisphenol A)

IT Photochromic substances

(dyes, photochromic ophthalmic lenses with high refractive indexes comprising ethoxylated bisphenol A)

IT Lenses

(eyeglass, photochromic ophthalmic lenses with high refractive indexes comprising ethoxylated bisphenol A)

IT 24448-20-2DP, Diacryl 101, polymers with polyurethanes
182552-45-0P 182552-46-1P

(photochromic ophthalmic lenses with high refractive indexes comprising ethoxylated bisphenol A)

L24 ANSWER 29 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1996:637551 HCAPLUS Full-text

DOCUMENT NUMBER:

INVENTOR(S):

126:11551

TITLE:

Contact lenses with hydrophilic crosslinkers Nunez, Ivan; Molock, Frank F.; Elliott, Laura Johnson & Johnson Vision Products, Inc., USA

PATENT ASSIGNEE(S): SOURCE:

U.S., 14 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 3.

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	
	US 5563183	A	•	US 1995-484134	
• •	CA 2178466	Αı	19961208	CA 1996-2178466	19960606
	EP 747734	A2	19961211	< EP 1996-304225 <	19960606
	EP 747734	B1	19971029 20010822		
	R: AT, BE, CH AU 9654799			FR, GB, GR, IE, IT, LI AU 1996-54799	
•	AU 695849 JP 09143230		19980827 19970603	JP 1996-168623	19960606
•	ZA 9604779	A	19971208	ZA 1996-4779	19960606
	AT 204653	т .	20010915	AT 1996-304225	19960606
•	CN 1106590	В	20030423	CN 1996-112211	19960607
PRIC	DRITY APPUN. INFO.			US 1995-484132	A 19950601
				US 1995-484133	A 19950607
				US 1995-484134	A 19950607

ED Entered STN: 20 Oct 1996.

AB Hydrophilic contact lenses made using a crosslinking agent of the formula, AY[OC(O):RC(O)xOY]nA wherein R contains one or more cyclic or bicyclic moiety; Y is linear or branched alkyl or alkenyl; A is acrylate, methacrylate, vinylbenzoyloxy or vinylphenoxy; h is 1 to 6; and x is 0 or 1, exhibit

## 10/549.696

superior hydrophilicity, oxygen transmissivity, and phys. properties. A reactive monomer mixture consisting of Darocur 1173 0.4, succinated diglycidyl bisphenol dimethacrylate crosslinking agent 8.26, hydroxyethyl methacrylate 76.3, and PEG 4500 dimethacrylate crosslinker 15.0 % was mixed with enough Glucam E-20 to make up 48 % reactive monomer/52 % diluent mixture The mixture was transferred to contact lens molds and the filled molds were exposed to UV light. The molds were then separated and placed in physiol. saline for 3 hs to remove the inert diluent and any unreacted monomers. The lenses had modulus 96 psi, elongation rate 110 %, tensile strength 62 psi, the equilibrium water content 49.1 %, and oxygen permeability 17 cm2/s·mL O2/mL·mmHg.

IT 180003-64-9P 183995-13-3P 183995-16-6P 183995-17-7P 183995-20-2P

(manufacture of soft contact lenses with poly(meth)acrylates containing hydrophilic crosslinkers)

RN 180003-64-9 HCAPLUS

2 2-Propenoic acid, 2-methyl-, polymer with 2-hydroxyethyl
2-methyl-2-propenoate and (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1.

CRN 1565-94-2 CMF C29 H36 O8

PAGE 1-B

CM 2

CPN 868-77-9 CMF C6 H10 O3

$$^{\rm H2C}$$
  $^{\rm O}$   $^{\rm Me}$   $^{\rm C}$   $^{\rm C}$   $^{\rm C}$   $^{\rm O}$   $^{\rm CH}$   $^{\rm C}$   $^{\rm CH}$   $^{\rm C}$   $^{\rm CH}$   $^{\rm C}$   $^{\rm CH}$   $^{\rm C}$   $^{\rm CH}$ 

CRN 868-77-9 CMF C6 H10 O3

RN 183995-16-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis[4,1phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester, polymer with
u-hydro-ω-hydroxypoly(oxy-1,2-ethanediyl) and
2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM :

CRN 25322-68-3

CMF (C2 H4 O)n H2 O

·CCI PMS

$$\texttt{HO} = \begin{bmatrix} & \texttt{CH}_2 - \texttt{CH}_2 - \texttt{O} & \\ & & \texttt{n} \end{bmatrix} \texttt{H}$$

Ciri

CRN. 1565-94-2 CMF C29 H36 O8

PAGE 1-B

O CH2.

CM<sub>1</sub> 3

CRN 868-77-9 CMF C6 H10 O3

CM I

CRN 25852-47-5

-CMF (C2 H4 O)'n C8 H10 O3

CCI FMS

CM C

CRN 1565-94-2 CMT C32 H36 O2

PAGE 1-B

O CH2

CRN 79-41-4 CMF C4 H6 O2

СН2 || Ме— С— СО2Н

RN 183995-13-3 HCAPLUS

CN Butanedioic acid, (1-methylethylidene)bis[4,1-phenyleneoxy[1-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-2,1-ethanediyl]] ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate and α-(2-methyl-1-oxo-2-propenyl)-ω-[(2-methyl-1-oxo-2-propenyl)oxylpoly(oxy-1,2-ethanediyl) (9CI) (CA\_INDEX\_NAME)

CM 1

CRN 100662-51-9 CMF C37 H44 O14

HO<sub>2</sub>C - CH<sub>2</sub> - CH<sub>2</sub>

PAGE 1-B

— CH2— CO2H —— C— C— Me

CH 2

CRN 25852-47-5

CMF (C2 H4 O)n C8 H10 O3

CCI PMS

 $\begin{array}{c|c} \text{H2O} & \text{O} \\ \text{Me} - \text{C} - \text{C} & \text{O} - \text{CH}_2 - \text{CH}_2 \\ \end{array} \begin{array}{c} \text{C} \text{H2} \\ \text{n} \end{array} \\ \text{O} - \text{C} - \text{Me} \end{array}$ 

CRN 868-77-9 CMF C6 H10 O3

CM 4

CRN 376-68-1 CMF C5 F6 O3

RN 183995-20-2 HCAPLUS

Butanedioic acid, (1-methylethylidene)bis[4,1-phenyleneoxy[1-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-2,1-ethanediyl]] ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM - 1 3 - 11 - 1

CRN - 100662-51-9/ CMF - C37 H44 014

CRN 868-77-9 CMF C6 H10 O3

H2C 0 Me\_C-C-O-CH2-CH2-OH

CM .

CRN 79-41-4... CMF C4 H6 O2

IC ICM C08F236-14 ICS G02C007-04

INCL 523106000

CC 63-7 (Phermaceuticals).

Section cross reference(s): 38

IT Contact lerses

(soff; manufacture of soft contact lenses with poly(meth)acrylates. containing hydrophilic crosslinkers)

TT 180003-64-9P 182995-13 37 103995-16-8P

183995-17-79 183995-30-29 :: :183995-22-4P

127064\_36\_20

(manufacture of soft contact lenses with poly(meth)acrylates containing hydrophilic crosslinkers)

L24 ANSWER 30 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN. ACCESSION NUMBER: 1996:524406 HCAPLUS Full-text

DOCUMENT NUMBER: 125:230873

TITLE: Low yellow index polymer compositions for

preparation of lenses

INVENTOR(S): Keita Gabriel; Renaudineau, Joel

PATENT ASSIGNEE(S). - Essilor International Compagnie Generals

D'optique, Fr.

SOURCE: U.S., 7 pp., Cont.-in-part of U.S. 5,442,022.

CODEN: USXXAM

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

			•			
	PATENT NO.	••	KIND	DATE	APPLICATION NO.	DATE
	US 5545828		A	19960813	US 1995-374378	19950118
	FR 2699541		A1	19940624	FR 1992-15533	19921222
	FR 2699541	<i>:</i> •.	B1 .	19950428		
	US 5442022		. A	19950815	US 1993-172137	19931221
• .	US 5702825		Α	19971230	US 1996-695790	19960812
PRI	ORITY APPLN.	INFO.:			FR 1992-15533	A 19921222
			· . · · · · · · · · · · · · · · · · · ·		US 1993-172137	A2 19931221
					US 1995-374378	A2 19950108

ED Entered STN: 31 Aug 1996 GI

$$\left[ H_{2}C = \frac{R_{1}^{1}}{C}O - (OCHR^{2}CH_{2})_{m} - O - \left[ \frac{1}{2} \right]_{2} X \right]$$

As a new polymer compast for use in the manufacture of ophthalmic leases which result from the copolymn of ≥ 50% of (I, R1, R2 = H, C1-C6 alkyl; X = O, S, S02, C0, CH2, CH:CH, C(CH3)2; m, n = 0-10) and 0.5-15% by weight of a monomer having an ethylenic unsata, which does not contribute to an arcmatic system and having a free hydroxy group in position α of the unsata. Is disclosed, as well as their use in ophthalmol, and apparatus using these leaces, such as eyepieces and film/video camera optics. A mixture of 92 parts tetraethoxy bis-phenol A dimethacrylate and 8 parts Et methacrylate was mixed with 0.5% cyclohexyl peroxydicarbonate followed by addition of allyl alc, and stirring to polymerize. The leases thus obtained had a yellow index of 1.62 as compared with 2.96 for the controls.

IT : 107001-67-2P 181472-71-9P 181472-72-9P

181472-73-1P 181472-74-3F 181472-75-3P

181472-76-4P 181472-77-5P 181472-78-69

181472-79-7P 181472-80-0F 181472-81-1F

181472-82-2P 131472-85-3P 181472-84-45

181472-85-5P 181472-87-7P 181472-89-9P

181472-90-2P 181472-91-3P

(low yellow index polymer compus. for preparation of lenses)

RN 107001-67-2 HCAPLUS

.CN

2-Propenoic acid, 2-methyl-, 1,1'-[(1-methylethylidene)bis(4,1-.phenyleneoxy-2,1-ethanediyloxy-2,1-ethanediyl)] ester, polymer with ethenylbenzene (CA JNDEX NAME)

CRN 56744-60-6 CMF C31 H40 O8

PAGE 1-A

PAGE 1-B

CM - 2

CRN 100-42-5 CMF C8 H8

H 2 C === CH - Ph

RN 181472-71-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene) bis (4,1-phenyleneoxy-2,1-ethanediyl) ester, polymer with ethyl 2-methyl-2-propenoate and 2-propen-1-ol (9CI) (CA INDEX NAME)

CM:

CRN 56744-60-6 CMF C31 H40 O8

PAGE 1-AT

CRN 107-18-6 CMF C3 H6 O

H2C == CH - CH2 - OH

CM 3

CRN 97-63-2 CMF C6-H10 02

H2C 0 || || || Me-C-C-OEt

RN 181472-72-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with ethyl 2-methyl-2-propen-i-ol (9CI) (CA INDEX NAME)

CM

CRN - 56744-60-6 CMF - C31 H40 O8

PAGE 1-B

CRN 513-42-8 CMF C4 H8 O

CM 3

CRN 97-63-2 CMF C6 H10 02

RN 181472-73-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) ester, polymer with 2-buten-1-ol and ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM: 3

CRN 56744-60-6 CMF C31 H40 O8

O CH2 — CH2 — O - CH2 — CH2 — O - C - Me PAGE 1-B

CRN 6117-91-5 ... CMF. C4 H8 O

H3C-CH-CH2-OH

. CM · 3

CRN 97-63-2 CMF C6 H10 O2

181472-74-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene) bis (4,1-phenyleneoxy-

2,1-ethanediyloxy-2,1-ethanediyl) ester; polymer with ethyl-

2-methyl-2-propenoate and (E)-2-hexen-1-ol (9CI) (CA INDEX NAME)

CM.

CPN 56744-60-6

CMF C31 H40 08

and the control of th

CM. 7

CRN 928-95-0

CMF C6 H12 Q

Double bond geometry as shown.

CM 3

CRN 97-63-2 CMF C6 H10 O2

H<sub>2</sub>C O Me—C—C—OEt

RN 181472-75-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyloxy, 2,1-ethanediyl) ester, polymer with

(Z)-2-butene-1,4-diol and ethyl 2-methyl-2-propenoate (9C1) (CA INDEX NAME)

CM 1

CRN 56744-60-6

CMF C31 H40 O8

H2C C Me\_C\_C\_C\_CH2\_CH2\_CH2\_CH2\_O\_CH2\_CH2\_O Me\_C\_C\_CH2\_CH2\_CH2\_O\_CH2\_CH2\_O

CM

CRN 6117-80-2

CMF - C4 H9 32 1

Double bond geometry as shown.

PAGE 1-B

CRN 97-63-2 CMF C6 H10 O2

H2C O Me\_C\_C\_OEt

RN 181472-76-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene) bis (4,1-phenyleneoxy-

2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with ethyl

2-methyl-2-propenoate and 3-methyl-2-buten-1-ol (9CI) (CA INDEX NAME)

CM 1

CRN 56744-60-6

CMF C31 H40 C8

PAGE 1-A

Me\_C\_C\_O\_CH2\_CH2\_O\_CH2\_CH2\_O\_

O Me O CH2

PAGE 1-B

O CH2 — CH2 — O — CH2 — CH2 — O — C — Me

CM 2

CRN - 556-82-1

CMF C5 H10 O

Me2C == CH - CH2 - OH

CM - 3

CRN 97-63-2 CMF C6 H10 O2

RN 181472-77-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-

2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with

2-cyclohexen-1-ol and ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 56744-60-6 CMF C31 H40 O8

СМ

CRN 822-67-3 CMF C6 H10 O

PAGE 1-B

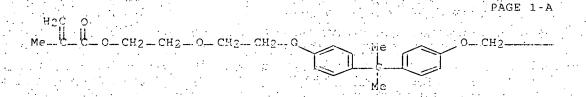
CRN 97-63-2 CMF C6 H10 O2

RN 181472-78-6 HCAPLUS

2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester, polymer with (1-methylethylidene) bis (4,1-phenyleneoxy-2,1-ethanediyloxy-2,1-ethanediyl) bis (2-methyl-2-propenoate) and 2-propen-1-ol (9CI) (CIINDEX NAME)

CM . . 1

CRN 56744-60-6 CMF C31 H40 O8



Citi

CRN 2082-81-7; CMF C12 HJ8 04

CM / 3

CRN 107-18-6 CMF C3 H6 O PAGE 1-B

H2C == CH - CH2 - OH

RN 181472-79-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with 2-methyl-2-propen-1-ol (9CI) (CA INDEX NAME)

CM 1

CRN 56744-60-6 CMF C31 H40 O8

PAGE 1-A

PAGE 1-B

'UM "

CRN 513-43-8 CNF C4 H8 U

СП2 Н3С-0-СП2-ОН

RN 181472-80-0 HCAFLUS

2-Propenoic acid, 2 methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with 2 buten-1-ol and 2-cyclohexen-1-ol (9CI) (CA INDEX NAME)

CM

CRM 56744-60-6 CMF C31 H40 O8

PAGE 1-A

PAGE 1-B

CM 2

CRN 6117-91-5 CMF C4 H8 O

CM : 3

CRN 822-67-3 CMF C6 H10 O

N 181472 81-1 HCAPLUS

CN 2-Propencic acid, 2-methyl-, (1-methylethylidene)bis(4.1-phenyleneoxy-2.1-ethanediyloxy-2.1-ethanediyl) ester, polymer with exo-1,//-reimethylpicyclo[2.2.1]hept-2-yl 2-methyl-2-propencate (9CI) (CA INDEX NAME)

CM 1

CRN 55744-60-6-CMF C34-H46 08

PAGE 1-A

PAGE 1-B

CM 2

CRN 7534-94-3 --CMF C14 H22 O2

Relative stereochemistry

RN 181472-82-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with phenylmethyl 2-methyl-2-propenoare (9CI) (CA INDEX NAME)

CM I

CRN 56744-50-6 CMF C31 H40 Q8

. H $_2$ C  $_0$ C  $_2$ C  $_3$ C  $_4$ C  $_4$ C  $_4$ C  $_5$ C  $_4$ C  $_5$ C  $_4$ C  $_5$ C  $_$ 

CRN 2495-37-6 CMF C11 H12 O2

H2C O | | | | Me-C-C-O-CH2-Ph

RN 181472-83-3 HCAPLUS

2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with 3-buten-2-ol (9CI) (CA INDEX NAME)

CM 1

CRN 56744-60-6 CMF C31 H40 C3

H2C O Me\_C\_C\_C\_O\_CH2\_CH2\_O\_CH2\_CH2\_C Me\_C\_C\_Ne

PAGE 1-P

CM 2

CRN 598-32-3 CMF C4 H8 O

ОН Н3С—СН—СН—— СН2 RN 181472-84-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene) bis (4,1-phenyleneoxy-

2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with

(E) -2-methyl-3-phenyl-2-propen-1-ol (9CI) (CA INDEX NAME)

CM 1

CRN 56744-60-6 CMF C31 H40 O8

PAGE 1-A

PAGE 1-B

CM 2

CRN 55131-20-9 CMF C10 H12 O

Double bond geometry as shown.

RN 181472-85-5 HCAPLUS

2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-

2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with

2-imethyl-5-(1-methylethenyl)-2 cyclohexen-1-ol (9CI) (CA INDEX NAME)

CM 3

CN

CRN 56744-60-6 CMF C31 H40 O8

PAGE 1-A

PAGE 1-B

CM

CRN 99-48-9 CMF C10 H16 0

191472-87-7 HCAPLUS
2-Propendic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanedivloxy-2,1-ethanediyl) ester, polymer with 6,6 dimethylbicyclo[3.1.1]hept-2-ene-2-mathano] (9CI) (CA INDEX NAME)

56744-60-6 CRM CMF C31 H40 O8

CRN 515-00-4 CMF C10 H16 O

RN 181472-89-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-

2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with

 $[11R - (1\alpha, 2\alpha, 4\alpha, 5\alpha)] - 4, 6, 6 -$ 

trimethylbicyclo[3.1.1]heptan-2-ol (9CI) (CA INDEX HAME)

CM- 1.

CRN 56744-60-6 CMF: C31 H40 O8

DAGE: 145

PAGE 1-B

CM 5, 2

CKN 515-88-8 CMF C10 H18 O

Absolute stereochemistry.

RN 181472-90-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-

2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with

(E)-3-phenyl-2-propen-1-ol (9CI) (CA INDEX NAME)

CM I

CRN 56744-60-6 CMF C31 H40 O8

PAGE 1-A

CM 2

CRN 4407-36-7 CMF C9 H10 O

Double bond geometry as shown.

RN 181472 31 3 FEAPLUS

CN 2-Propencic acid, 2-methýl-, (1-methylethylidene) bís (4,1-phenyleneoxy-2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with 3-methyl-2-buten-1-ol (9CI) (CA INDEX NAME)

CM ... 1

CRN 56744-60-6 CMF C31 H40 08

PAGE 1-A :

PAGE 1 -F

CM 2

CRN 556-82-1 CMF C5 H10 O

Me 2.C == CH - CH 2 - OH

IC ICM C08F232-04 ICS C08F220-30

INCL 526072000

CC 63-7 (Pharmaceuticals)

Section cross-reference(s):/35, 38

IT Lenses

(camera, low yellow index polymer compns. for preparation of lenses)

IT Lenses

(eyeglass, low yellow index polymer compns. for preparation of lenses)

IT 107001-67-28 181472-71-98 181472-72-08

. 181472-73-1P. 133472-74-29 (181472-75-3P)

181472-76-4P 161472-77-5P 161472-78-6P

181472-79-7F 181472-80-0F 181472-81-1P

181472-82-22 191172-83-32 191472-84-42

181472-85-5P 181472-87-7P 181472-89-9P

181472-90-2P 181472-91-3F

(low yellow index polymer compns. for preparation of lenses)

L24 ANSWER 31 OF 49 HCAPLUS COPYPIGHT 2007 ACS on STN ACCESSION NUMBER: 1996:162977 HCAPLUS Full-text

DOCUMENT NUMBER: Western 124:212433 For present

TITLE: A composition for a large polymerizable composition for a large

manufacturing organic glasses for ophthalmic.

lenses

## 10/549,696

INVENTOR(S): Imura, Satoshi; Nagoh, Hironobu; Kuramoto

Kazuhiko 🔑

PATENT ASSIGNEE (S):

Tokuyama Corp., Japan .

SOURCE:

Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
	EP 691550		A2	19960110	EP 1995-304684	19950704
	EP 691550		. A3	19961023	<	
	•	ES, FR,				
• •	JP 08020615		A	19960123	JP 1994-157007	19940708
٠.	JP 3085570		B2	20000911	•	
•	AU 9524801		A	19960118	AU 1995-24801	19950704
•	AU 692257		B2	19980604		
	US 5556931		Α	19960917	US 1995-499070	19950706
PRIO	RITY APPLN.	INFO.:			< JP 1994-157007	A 19940708

ĖD Entered STN: 21 Mar 1996

A polymerizable composition comprising at least two di(meth)acrylate of AΒ polyethylene glycol adduct of 2,2-bis(4-hydroxyphenyl)propane (1) and organic glass formed of the polymer is claimed. The polymerizable composition being is as a transparent resin, particularly as a raw material for an ophthalmic lens which is free of optical strain, is with sufficient hardness and is excellent in impact resistance and light resistance. Thus, 0.1 part 1hydroxycyclohexyl Ph ketone was added to 100 parts of a polymerizable composition containing T 30, and glycidyl methacrylate 10 parts and the mixture was cast into mold and exposed to UV light. After polymn, the polymer was taken out and heat-treated at 130° for 1 h to relax an internal stress. The polymer had refractive index of 1,549, hardness of 92, and impact resistance of 160 q.

87028-19-1P 174460-33-3P 174460-33-4P. 174460-84-5P 174400 85-6P 174460-86-7P

> (acrylic polymerizable composition for manufacturing organic glasses for ophthalmic lenses)

RN 87028-19-1 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with CN  $\alpha, \alpha'$  - [(1-methylethylidene)di-4,1-phenylene]bis[ $\omega$ -[(2methyl-1-oxo-2-propen 1-yl)ox, poly(oxy-1,2-ethanediyl)] NAME)

CRN 41637-38-1

(C2 H4 O)n (C2 H4 O)n C23 H24 O4 CMF

CCI

PAGE 1-A.

$$H_2C$$
 0

 $Me-C-C-C-C-CH_2-CH_2-CH_2$ 
 $Me$ 
 $Me$ 
 $Me$ 

PAGE 1-B

CM 2

CRN 868-77-9 CMF C6 H10 O3

RN 174460-82-3 HCAPLUS

CN 2-Propensic acid, 2-methyl-, oxiranylmethyl ester, polymer with α;α'-[(1-methylethylidene)di-4,1-phenylene)bis[ω-[(2-

methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM I

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

CCI PMS

PAGE 1-B

$$-CH2 - nOCC - Me$$

CM 2

CRN 106-91-2 CMF C7 H10 O3

.RN 174460-83-4 HCAPLUS

CN 2-Propensic acid, 2-methyl-, oxydi-2,1-ethanediyl ester, polymer with  $\alpha,\alpha'$ -[(1-methylethylidene)di-4,1-phenylene]bis[ $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] (9C1) (CA INDEX NAME)

CM 1

CRN 41637-38-1.

CMF (C2 H4 C)n (C2 H4 O)n C23 H24 O4

CCİ PMS

PACE "1-E:

CM 2

CRN 2358-84-1 CMF C12 H18 O5

RN 174460-84-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with  $\alpha,\alpha'$ -[(1-methylethylidene)di-4,1-phenylene]bis[ $\omega$ -[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] (9CI) (CA\_INDEX\_NAME)

CM .

CRN 64401-02-1

CMF (C2 H4 O)n (C2 H4 O)n C21 H20 O4

CCI PMS

$$H_2C = CH - U - O - CH_2 - CH_2 - O$$

$$Me$$

$$Me$$

CM 2

CRN 106 91 2 CMF C7 H10 03.

RN 174460-85-6 HCAPLUS

2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with

## 10/549,696

 $\alpha$ ,  $\alpha$ '-[(1-methylethylidene)bis(2,6-dibromo-4,1-phenylene)]bis[ $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 103345-71-7

CMF (C2 H4 O)n (C2 H4 O)n C23 H20 Br4 O4

CCI PMS

PAGE 1-B.

CM .2

CRN 106-91-2 CMF 67 H10 03

RN 174469-86-7 HCAPLUS

CN 2-Propenoic acid: 2-methyl-, oxiranylmethyl-ester, polymer with
 α,α'-[(1:methylethylidene)di-4,1-phenylene]bis[ω-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] and
 exo-1,7.7-irimethylbicyclo[2.2.1]hept-2-yl 2-methyl-2-propenoate (9CI)

(CA INDEX NAME)

CM

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4 CCT PMS

PAGE 1-A

PAGE 1-B

CM 2

CRN 7534-94-3.
CMF C14 H22 O2

Relative stereochemistry.

CM 3

CRN 106-91-2 CMF C7 H10 O3

IC ICM G02B001-04

ICS C08F220-30 CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 38

IT Lenses

(eyeglass, acrylic polymerizable composition for manufacturing organic glasses

for ophthalmic lenses)

IT 64696-13-5P 87028-19-1P 174460-82-3P 174460-83-4P 174460-84-5P 174460-85-6P 174460-86-7P

(acrylic polymerizable composition for manufacturing organic glasses for ophthalmic lenses)

L24 ANSWER 32 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1996:106702 HCAPLUS Full-text

DOCUMENT NUMBER:

124:212138

TITLE:

Polymeric ophthalmic lens prepared from

unsaturated polyoxyethylene monomers

INVENTOR(S):

Molock, Frank F.; Nunez, Ivan M.; Ford, James D. Johnson and Johnson Vision Products, Inc., USA

PATENT ASSIGNEE(S): SOURCE:

U.S., 19 pp. Cont.-in-part of U.S. Ser. No.

29,220, abandoned....

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English :

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5484863	A	19960116	US 1993-156135	19931122
CA 2117218	С	19940911	< CA 1994-2117218	19940308
CA 2117218 F1 9401122	A1 A	19940911 19940911	< F1 1994-1122	19940309
NO 9400829		19940912	< NO 1994-829	19940309
EP 614921	A.2	19940914	<-+ EP 1994-301661	19940309
EP 614921 EP 614921		19950802 19970820		
R: AT, BE, C CN 1099042			SB, IE, IT, LI, LU, NI CN 1994-104312	
CN 1065545 HU 67848	B A2	20010509 19950529	HU 1994-699	19940309
ZA 9401646	A	19950911	ZA 1994-1646	19940309
AT 157105	T	19970915	AT 1994-301661	19940309
ES 2107128	Т3	19971116	ES 1994-301661	19940309
SG 73965	A1	20000713	SG 1996-5831 <	19940309
			AU 1994-57730 <	199:0310
AU 670856 BR 9401119		19960801	BR 1994-1119	19940310
JP 06322051	Ā	19941123	TP 1994-65437	19940310

JP 3519446

B2 20040412

PRIORITY APPLN. INFO.:

US 1993-29220

B2 19930310

US 1993-156135

19931122

ED Entered STN: 21 Feb 1996

ÁΒ A soft hydrogel contact lens, is disclosed. The lens is derived from a crosslinked polymer comprising the reaction product of a monomer mixture comprising: (A) a monounsatd. polyoxyethylene monomer; (B) a diunsatd. polyoxyethylene monomer of relatively high mol. weight; (C) a diunsatd. polyoxyethylene monomer of relatively low mol. weight; and (D) a hydrophilic monomer selected from the group consisting of hydroxyethyl methacrylate, methacrylic acid, N,N-dimethylacryiamide, N-vinyl pyrrolidone, glycerol monomethacrylate, itaconic acid, and mixts, thereof. For example, a monomer mixture containing hydroxyethyl methacrylate 43.6, isocyanatoethyl methacrylate-diterminated PEG 15.0, isocyanatoethyl methacrylate-diterminated ethoxylated bisphenol A 10.0, isocvanatoethyl methacrylate-monoterminated monomethoxy PEG 31.0, and Darocur 1173 0.4% and a diluent mixture containing Glucam E-20 50 and ethoxylated bispherol A 50%, was thoroughly mixed at the ratio of 60 to 40 and transferred to a contact lens mold. The mold was exposed to UV light for polymerization to give a clear hydrogel. The lensshowed modulus 136 psi, elongation rate 114%; water content 58%, and O permeability of 22+10-11cm2·mL 02/s·mL·mmHq.

TT 174493-55-1P 174493-57-3P 174493-58-4P 174493-61-9P 174530-09-7P

(soft contact lenses manufacture with polymers prepared from unsatd. polyoxyethylene monomers)

RN 174493-55-1 HCAPLUS:

CH

CRN 98312-09-5 CMF (C2 H4 O)n (C2 H4 O)n C29 H34 N2 O8 CGI PMS

CRN 868-77-9 CMF C6 H10 O3

RN 174493-57-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[(heptadecafluorooctyl)oxy]carbonyi]a
 minolethyl ester. polymer with N,N-dimethyl-2-propenamide,
 2-hydroxyethyl 2-methyl-2-propenoate, α, α\*-[(1 methylethylidene)di-4,1-phenylene]bis[ω--[(2-methyl-1-oxo-2 propenyl)oxy]poly(oxy-1,2-ethanediyl)] and α--[[[2--[(2-methyl-1 oxo-2-propenyl)oxy]ethyl]amino]carbonyl]-ω--[[[[2--[(2-methyl-1 oxo-2-propenyl)oxy]ethyl]amino]carbonyl]oxy]poly(oxy-1,2-ethanediyl)
 (9CI) (CA INDEX NAME)

CM: 1

CRN 163068-27-7 CMF C15 H10 F17 N O4

C.1 2

CPN .05515-67-1 CMF (C2 H4 O)n C14 H20 N2 O7 CCI PMS

# 10/549,696

H<sub>2</sub>C O 
$$\stackrel{\circ}{\text{Me}}$$
 C O  $\stackrel{\circ}{\text{C}}$  CH<sub>2</sub> CH<sub>2</sub> CH<sub>2</sub> O  $\stackrel{\circ}{\text{C}}$  NH CH<sub>2</sub> CH<sub>2</sub>

PAGE 1-B

CM 3

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

CCI PMS

instruktion of the control of the second of the control of the control of the control of the page (1-A). The control of the co

$$H_2C = 0$$
 $Me = C = 0$ 
 $CH_2 = CH_2 = 0$ 
 $Me$ 
 $Me$ 
 $Me$ 

FWOR I-S

CM 4

CRN 0580-03-7

CHE C5 H9 H O

CM S

CRN 868-77-9 CMF C6 H10 O3

RN 174493-58-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with

N, N-dimethyl-2-propenamide,  $\alpha$ ,  $\alpha$ '-[(1-methylethylidene)di-

4,1-phenylene] bis  $[\omega - [(2-methyl-1-oxo-2-propenyl) oxy]$  poly (oxy-1,2-ethanediyl)] and  $\alpha - [[[2-[(2-methyl-1-oxo-2-propenyl)]]]$ 

propenyl) oxylethyl] amino] carbonyl] - $\omega$ -[[[[2-[(2-methyl-1-oxo-2-) propenyl) oxylethyl] amino] carbonyl] oxylpoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 95615-67-1

CMF (C2 H4 O)n C14 H20 N2 O7

CCI PMS

PAGE 1-B

CM 2

CRN 41637-38 1

CMF, (C2 H4 C)n (C2 H4 O)n C23 H24 O4

CCI PMS

PAGE 1-A

PAGE 1-B

$$-CH_2$$
  $0$   $CH_2$   $0$   $CH_2$   $0$   $CH_2$   $0$   $CH_2$   $0$   $CH_2$   $0$   $CH_2$ 

CM 3

CRN 2680-03-7 CMF C5 H9 N O

CM · 4

CRN 868-77-9 CMF C6 H10 03

CM 1

CRN 118889-33-1

CMF (C2 H4 O)n C8 H13 N O4

CCI PMS

CM 2

CRN 95615-67-1

CMF (C2 H4 O)n C14 H20 N2 O7

CCI PMS

PAGE 1-B.

CM 3

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

CCI- PMS

$$H_{2}C = 0$$
 $Me = C = CH_{2} = CH_{2} = 0$ 
 $Me = CH_{2} = CH_{2} = 0$ 
 $Me = CH_{2} = CH_{2} = 0$ 
 $Me = CH_{2} = CH_{2} = 0$ 

$$-CH2 - nOCC - CM2$$

CM 4 ·

CRN 868-77-9 CMF C6 H10 O3

RN 174530-09-7 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-[[[(heptadecafluorooctyl)oxy]carbonyl]a mino]ethyl ester, polymer with N,N-dimethyl-2-propenamide, 2-hydroxyethyl 2-methyl-2-propenoate, α,α'-[(1-methylethylidene)di-4,1-phenylene]bis[ω-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)], α-[[[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]amino]carbonyl]-ω-hydroxypoly(oxy-1,2-ethanediyl) and α-[[[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]amino]carbonyl]-ω-[[[[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]amino]carbonyl]-ω-[[[[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]amino]carbonyl]oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 163068-27-7 CMF C15 H10 F17 N O4

CM 2

CRN 110970-54-2

CMF : (C2 H4 O)n C7 H11 N O4

CCI PMS

$$HO = \begin{bmatrix} CH_2 - $

CRN 95615-67-1

CMF (C2 H4 O)n C14 H20 N2 O7

CCI PMS

PAGE 1-B

CM 4

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4

CCI · PMS ·

PAGE 1-B

CM 5

CRN 2680-03-7

CMF C5 H9 N O

0 Me<sub>2</sub>N — C — CH — CH<sub>2</sub>

CM 6

CRN 868-77-9 CMF C6 H10 O3

H2C C Me--C--C--O--CH2--CH2--OH

IC ICM C08F226-02

ICS. C08F236-20; G02C007-04

INCL 526301000

CC 63 7 (Pharmaceuticals)

IT Lenses

(contact, soft, soft contact lenses manufacture with polymers prepared from unsatd polyoxyethylene monomers)

IT - 39434-94-1P, Polyethylene glycol borate : 174493-52-8P : 174493-53-9P

174493-54-0P 174493-55-1P 174493-56-2P 174493-57-3P 174493-59-4P 174493-59-5P 174493-60-8P 174493-61-9P 174530-09-7P

(soft contact lenses manufacture with polymers prepared from unsatd. polyoxyethylene monomers)

L24 ANSWER 33 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1995:808084 HCAPLUS Full-text

DOCUMENT NUMBER: 123:208943

TITLE: Manufacture of water-containing contact lenses

with vinyl copolymers

INVENTOR(S): Inomata, Kyoshi; Nakada, Shinji; Koinuma,

Yasuyoshi

PATENT ASSIGNER(S): Nippon Oils & Fats Co Ltd, Japan.

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.,

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNTER TO

PATENT INFORMATION.

PATENT NO	KIND	DATE	APPLICATION NO. DATE
JP 07168139	Α	19950704	JP 1993-317039 19931216
PRIORITY APPLN: INFO.:			JP 1993-317039 19931216

ED Entered STN: 23 Sep 1995

AB Water-containing contact lenses with improved durability, oxygen permeability and stain-resistance are prepared with a copolymer containing crosslinking vinyl monomers. As an example, Epoxyester 300000 (the vinyl monomer; compound

## 10/549,696

A) and 2-hydroxyethyl methacrylate were reacted and made into contact lenses having oxygen permeability: 43 X 10-11mL(STP)cm/cm2.s.mmHg and compressed strength: 420g.

IT 101181-05-9P 168061-62-9P 168061-63-0P 168061-64-1P 168061-65-2P 168061-66-3P

168061-67-4P 168061-68-5P 168061-69-6P

168061-70-9P

(manufacture of water-containing contact lenses with vinyl copolymers)

RN 101181-05-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,1'-[(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)]] ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1:

CRN 1565-94-2 CMF C29 H36 O8

PAGE 1-A

H2C O OH

Me\_C\_C\_C\_O\_CH2\_CH\_CH2\_O

Me

O\_CH2\_CH\_CH2\_O

Me

PAGE 1-B

O CH<sub>2</sub>

CM 2

CRN 868-77-8 CMF C6 H10 03

H2C O. Me C C O CH2 - CH2 - CH

RN 168061-62. 0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene) bis(4,1-phenylencovy(2-hydroxy 3,1-propanediyl)] ester, polymer with 1-ethenyl 2-pyrrolidinone and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CRN 1565-94-2

CMF C29 H36 O8

PAGE 1-A

PAGE 1-B

$$-^{0}_{\mathrm{C-Me}}^{\mathrm{CH}_{2}}$$

CM 2

CRN 868-77-9 CMF C6 H10 O3

CM 3

CRN 88-12-0 CMF C6 H9 N O

RN 168061-63-0 HCAPLUS

2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyi) ester. polymer with 1-ethenyl-2-pyrrolidinone, 2-hydroxyethyl-2-methyl-2-propenoate and methyl-2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM I

CRN 24448-20-2 CMF C27 H32 O6

CRN 868-77-9 CMF C6 H10 O3

CM 3

CRN 88-12-0 CMF C6 H9 N O

..CM : . 4

CRN 80 62-6 CMF C5 H8 O2

RN 168061-64-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenylemeoxy-2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with N,N-dimethyl-2-propenamide, 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM :

CRN 56744-60-6 CMF C31 H40 O8:

PAGE 1-A

$$^{\text{H}_2\text{C}}_{\text{Me}}$$
  $^{\text{C}}_{\text{C}}$   $^{\text{O}}_{\text{C}}$   $^{\text{C}}_{\text{C}}$   $^{\text{C}}_{\text{C}}$ 

PAGE 1-B

CM 2

CRN 2680-03-7 CMF C5 H9 N O

· · · CM 3

CRN 868-77-9 CMF C6 H10 O3

CM

CRN 80-62-6 CMF Ç5 H8 O2

RN 168061-65-2 HCAPLUS

CN 3,5,8-Trioxa-4-phosphaundec-10-en-1-aminium, 4-hydroxy-N,N,N,10tetramethyl-9-oxo-, chloride, 4-oxide, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, (1-methylethylidene)bis (4,1-phenyleneoxy (2hydroxy-3,1-propanediyl)] bis (2-methyl-2-propenoate) and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 146126-84-3 CMF C11 H23 N O6 P . Cl

**©** C1

CM 2

CRN 1565-94-2 CMF C29 H36 08

PAGE 1-B

CM -3

CRN 868-77-9° CMF C6 H10 O3

CRN 80-62-6 CMF C5 H8 O2

RN 168061-66-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-pkenyleneoxy-2,1-ethanediyl) ester, polymer with methyl 2-methyl-2-propenoate and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 24448-20-2 CMF C27 H32 O6

$$^{\text{H}_2\text{C}}$$
 0  $^{\text{CH}_2}$   $^{\text{O}}$   $^{\text{CH}_2}$   $^{\text{CH}_2}$   $^{\text{O}}$   $^{\text{CH}_2}$   $^{\text{CH}_2}$   $^{\text{O}}$   $^{\text{CH}_2}$   $^{\text{CH}$ 

CM 2

CRN 2530-85-0 CNS C10 H20 05 Si

CM .

CHN 80-62-6 CMF C5 H8 O2

RN 168061-67-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis[4,1-phenyleneoxy(1-methyl-2,1-ethanediyl)oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with methyl 2-methyl-2-propenoate and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 162036-59-1 CMF C35 H48 O10

ОН О СН2 — СН2— СН— СН2— О— С— С— Ме

CM 2 ......

CRN 2530-83-0 CMF C10 H20 05 Si

H2C O OME Me\_C\_C\_O\_(CH2)3\_Si\_OME

CM 3

CRN 80-62-6 CMF C5 H3 02

RN 168061-68-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-

2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with methyl

2-methyl-2-propenoate, 2,2,2-trifluoroethyl 2-methyl-2-propenoate and

3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 56744-60-6

CMF C31 H40 O8

PAGE 1-A

PAGE 1-B

CM 2

CRN 2530-85-0 CMF C10 H20 C5 S1

H2C O. CMe

Me 
$$= C - C - O - (CH_2) 3 - Si - OMe$$

CM 3

CRN 352-87-4

CMF. C6 H7 F3 O2.

CRN 80-62-6 CMF C5 H8 O2

H<sub>2</sub>C 0 Me\_C\_C\_OMe

RN 168061-69-6 HCAPLUS
CN 2-Butenedioic acid (2E)-, bis(1,1-dimethylethyl) ester, polymer with

ethyl 2-methyl-2-propencate and (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bis(2-methyl-2-propencate)

(9CI) (CA INDEX NAME)

CM 1

CRN 7633-38-7

CMF C12 H20 O4

Double bond geometry as shown.

CM :

CRN 1565-94-2 CMF C29 H36 O8

CRN 97-63-2 CMF C6 H10 O2

RN 168061-70-9 HCAPLUS

CN 2-Butenedioic acid (2E)-, 1-methylethyl 3-(trimethoxysilyl)propyl ester, polymer with (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) bis(2-methyl-2-propenoate) and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM

CRN: 165967-78-2 CMF: C13 H24 O7 Si

Double bond geometry as shown.

$$i-PrO$$
 $CH_2$ 
 $3$ 
OMe
OMe

CM

CRN: 24448-20-2 CMF C27 H32 O6

CM 3

CRN . 80-62-6 CMF C5 H8 O2

H2C O Me\_C\_C\_OMe

IC ICM G02C007-04

ICS C08F020-28; C08F290-06

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 38

IT Leused

(contact, water-containing; manufacture of water-containing contact lenses

vinyl copolymers)

IT 101181-05-9P 168051-62-9P 168061-63-0P 168061-64-1P 168061-65-2P 168061-66-3P 168061-67-4P 168061-68-5P 168061-69-6P

1.58051-70-9P

(manufacture of water-containing contact lenses with vinyl copolymers) 

124 ANSWER 34 OF 49 HCAPLUS COPYRIGHT 2007 ACS OR STN ACCESSION NUMBER: 1995:794923 HCAPLUS Full-text

123:179545

DOCUMENT NUMBER:

Method of forming shaped hydrogel articles including contact lenses using inert displaceable

diluents

INVENTOR (S):

Nunez, Ivan M.; Molock, Frank F.; Elliott, Laura

D.; Ford, James D.

PATENT ASSIGNEE(S):

1986年,中国1975<mark>,中国1976年,</mark>

Johnson and Johnson Vision Products, Inc., USA

SOURCE: 14 14 16 16 16 Can. Pattl Appl., 68 pp. 114 16 16 18 CODEN! CPXXEB

DOCUMENT TYPE:

ÇODEN: CPXXEB Patent English

LANGUAGE: English: FAMILY ACC: NUM. COUNT: 1

PATENT INFURNATION:

PATEUT NO.	KIND	DATE	AFFLICATION NO.	DATE
CA 2128118	A1 ].	19950123	CA 1994-2128118	19940715
US 5457140	A	19951010	US 1993-96145	19930722
ID 110123	A	19980715	IL 1994-110122	19940624
UP 07709415	Α	19950425	dr 1994-186858	19940718
AU 94c7568	Α	19950202	AU 1994-67566	19940719
AU .677062.	В2	19970410		
Pl 9493160	A		P1 1994-3460	19940721
NO 9402737	A	19950123	NO 1994-2737	19940721
EP 642039	A2	19950308	EP 1994-305394	19940721

	ΕP	642.039		. A3	19950726			, .	•
٠.	ΕP	642039		. B1 .	20011031				
		R: AT,			, ES, FR,	GB, II	É, IT, LI, I	U, NL,	PT, SE
	BP	9402904		Α	19950411	BR	1994-2904		19940721
						•	·< * *.		
	HU.	68045		A2	19950529	HU	1994-2146		19940721
				•			<		4
	ZA	9405378		Α	19960122	ZA	1994-5378		19940721
							<		
	ΑT	208046		T .	20011115	· AT	1994-305394	<u>!</u> .·	19940721
							<		
	SG	97730		A1	20030820	SG	1996-258		19940721
•							<		
	CN	1105370		A	19950719	CŅ	1994-108160	)	19940722
٠.			•				<		•
		1058025		В	20001101		1005 41000		10050304
	US	5684058		Α	199/1104	US	1995-410025	). ·	19950324
	770	5490959		A. A.	10000212	TIC	< 1995-455948		19950531
	US.	5490959.		A	19960213				19930331
	ne.	5490960		Α	19960213		< 1995-456133		19950531
	. 0.5	3432300					· < ~.~·		
	US	5498379		A	19960312		1995-45535	7. : · · · · · · · · · ·	19950531
	· 7.77						<		
	US	5594043		A	19970114	US	1995-45488	i	19950531
							<		
	US	5736409		Α	19980407	US	1996-645999	9	19960514
	٠.	** **			. •		· · · · · · · · · · · · · · · · · · ·	· · · · · ·	
	US	5910519		A	19990608	US	1997-918714	1	19970801
	٠.					• .	<		
	HK,	1003449		A1.	20020412	HK	1998-102566	5	19980325
1 			********				<		10000000
PR (O)	K (TE)	APPLN.	TNEO.			US	1993-96145	. <i>P</i>	19930722
						110	< 1995-410025	, n	3 19950324
		en e					15537410023		

ED Entered STN: 16 Sep 1995

AB Shaped hydrogel articles such as soft contact lenses are prepared by the steps of: (1) molding or casting a polymerization mixture comprising: (a) a monomer mixture comprising a major proportion of one or more hydrophilic monomers such as 2 hydroxyethyl methacrylate, and one or more crossrinking monomers; and (b) an inext, displaceable diluent selected from the group consisting of: (i) ethoxylated elkyl glucoside; (ii) ethoxylated bisphanol A; (iii) polyethylene giycoi; (i v) mixture of propoxylated and ethoxylated alkyl glucoside; (v) single phase mixture of ethoxylated or propoxylated alkyl glucoside and C2-12 dihydric alc.; (vi) adduct of s-caprolactone and C2-6 alkanediols and triols; (vii) ethoxylated C3-6 alkanetriol; and (viii) mixts. of one or more of (i) through (vii), under conditions to polymerize said monomer mixture to produce a shaped gel of a copolymer of said monomers and said diluent; and (2) thereafter replacing said diluent with water.

IT 167859-50-9P 157859-51-0P

(forming shaped hydrogel articles including contact lenses using inert displaceable diluents)

RN 167859-50-9 HCAPLUS

2-Propenoid acid, 2-methyl-, polymer with 2-hydroxyethyl
2-methyl-2-propenoate,  $\alpha,\alpha'$ -[(1-methylethylidene) $\alpha$ ---,1phenylene]bis[ $\alpha$ -[[[[2-[(2-methyl-1-oxo-2propenyl)oxy]ethyl]amino]carbonyl]oxy]poly(oxy-1,2-ethanediyl)] and  $\alpha$  !([2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]amino]carbonyl]

# 10/549,696

 $\omega \text{-[[[[2-[(2-methyl-1-oxo-2-propenyl)\,oxy]\,ethyl]\,amino]\,carbonyl]\,oxy]} poly\,(oxy-1,2-ethanediyl) \ (9CI) \ (CA INDEX NAME)$ 

CM 1

CRN 98312-09-5

CMF (C2 H4 O)n (C2 H4 O)n C29 H34 N2 O8

CCI PMS

PAGE 1-A Me CH2 
$$\begin{array}{c} \text{CH}_2 \\ \text{Me-} \\ \text{C-} \\ \text{C-} \\ \text{C-} \\ \text{O-} \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{OH}_2 \\ \text{O-} $

PAGE 1-B

CM, 1 2 ... 1 ... 1...

CRN 95615-67-1

CMF (C2 H4 O)n C14 H20 N2 O7

CCI PMS.

CRN 868-77-9 CMF C6 H10 O3

H2C O Me-C-C-O-CH2-CH2-OH

CM 4

CRN 79-41-4 CMF C4 H6 O2

CH<sub>2</sub> || Me-C-CO<sub>2</sub>H

RN. 167859-51-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with
N,N-dimethyl-2-propenamide, α-[(methylamino)carbonyl]-ω-[2[(1-oxo-2-propenyl)oxy]ethoxy]poly(oxy-1,2-ethanediyl);
α,α'-[(1-methylethylidene)di-4,1-phenylene]bis[ω[[[[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]amino]carbonyl]oxy]poly(oxy-1,2-ethanediyl)] and α-[[[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]amino]carbonyl]-ω-[[[[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]amino]carbonyl]oxy]poly(oxy-1,2-ethanediyl) (9CT)
(CA INDEX NAME)

CM :

CRN 98312-09-5 (C2 H4 O)n C29 H34 N2 O8

CCI PMS

PAGE 1-B

$$\begin{array}{c|c} & & & \\ \hline & O-CH_2-CH_2-D-C-NH-CH_2-CH_2-O-C-C-Me \\ & & & \\ \hline \end{array}$$

CM 2

CRN 95615-67-1

CMF (C2 H4 O)n C14 H20 N2 O7

CCT PMS

CM 3

CPN 80501-34-4

CMF (C2 H4 O)n C7 H11 N 04

CCI PMS .

CM 4

CRN 2680-03-7 CMF C5 H9 N O

CRN 868-77-9 CMF · C6 H10 O3

H2C 0 Me\_\_\_\_\_O\_\_CH2\_\_CH2\_\_OH

IC ICM B29D011-00

ICS B29C071-00; C08F002-06; G02C007-04; G01N025-48

CC .63-7 (Pharmaceuticals)

IT . Lenses .

(contact, forming shaped hydrogel articles including contact lenses using inert displaceable diluents)

868-77-9DP, polymers : 868-77-9P: 137737-62-3P 167859-50-9P

167859-51-0P 174588-08-0P

(forming shaped hydrogel articles including contact lenses using inert displaceable diluents)

L24 ANSWER 35 OF 49 HCAPLUS COFFRIGHT 2007 ACS on STN ACCESSION NUMBER: 1995:550907 HCAPLUS Full-text

DOCUMENT NUMBER:

122:291777

TITLE:

Crosslinked polymers forming hydrogels, and soft

contact lenses therefrom

INVENTOR(S):

Molock, Frank F.; Ford, James D.; Nunez, Ivan M. Johnson and Johnson Vision Products, Inc., USA

SOURCE:

Eur. Pat. Appl., 43 pp.

DOCUMENT TYPE:

Patent.

CODEN: CPXXDW:

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

	FATENT NO.	KIND	DATE APPLICATION NO.	DATE
	E9 614921	A2	19940914 : EP 1994-301661	19940309
	EP 511921 EP 614921		19950802 19970820	
	- · · · · · · · · · · · · · · · · · · ·		, ES, FR, GP, TE, IT, LI, LU, NL 19960116 US 1993-156135	, PT, SE 19931122
PRTO	RITY APPLN. INFO	).:		A 19930310
1. 4 %			US 1993-156135	A 19931122

ED Entered STN: 17 May 1995

AB The polymer is the reaction product of a monomer mixture comprising (A) a monounsatd, polyoxyethylene monomer; (B) a diunsatd, polyoxyethylene monomer

of mol. weight 2000-11,000; (C) a diunsatd. polyoxyethylene monomer of mol. weight <2000; and (D) as hydrophilic monomer(s) hydroxyethyl methacrylate (I), methacrylic acid, N,N- dimethylacrylamide (II), N-vinylpyrrolidone, glycerol monomethacrylate, and/or itaconic acid. Polymerization of a blend of I 22.86, II 12.0, CH2:CMeCO2CH2CH2NHCO(OCH2CH2)nO2CNHCH2CH2O2CCMe:CH2 (from PEG 4500) 10.2, Me(OCH2CH2)nO2CNHCH2CH2O2CCMe:CH2 (from PEG 2000) 1.5, ethoxylated bisphenol A (mol. weight 580) bis(methacryloyloxyethylcarbamate) 9.0, CF3 (CF2) 702CNHCH2CH2O2CCMe: CH2 4.2, Darocur 1173 0.24, and polyethylene glycol borate (inert diluent) 40% at 65° for 45 min and molding under UV irradiation at 65° gave a contact lens with equilibrium water content 53%. O permeability (Dk value) 22, modulus 108 psi, and elongation 79%. IT 163068-28-8P 163068-30-2P 163068-31-3P (crosslinked polymer hydrogels for soft contact lenses) RN163068-28-8 HCAPLUS 2-Propenoic acid, 2-methyl-, 2-[[[(heptadecafluorooctyl)oxylcarbonvl]a CN minolethyl ester, polymer with N.N-dimethyl-2-propenamide, 2-hydroxyethyl 2-methyl-2-propenoate,  $\alpha, \alpha'$ -[(1--methylethylidene) di-4, 1-phenylene]  $bis[\omega-[[[2-((2-methyl-1-oxo-2-methyl-1)])]]$ propenyl)oxy]ethyl]amino]carbonyl]oxy]poly(oxy-1,2-ethanediyl)],  $\alpha$ -[[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]amino]carbonyi]- $\omega$ -methoxypoly(oxy-1,2-ethanediyl) and  $\alpha$ -[[[2-[(2-methyl-1oxo-2-propenyl) oxy] ethyl] amino] carbonyl] -0-[[[[2-[(2-methyl-1oxo-2-propenyl)oxy]ethyl]amino]carbonyl]oxy[poly(oxy-1,2-ethanediyl) (CA INDEX NAME) (9CI) CM CRN 163068-27-7 CMF C15 H10 F17 N O4

$$MeO = \begin{bmatrix} CH_2 - CH_2 - O & 0 & 0 \\ 0 & CH_2 - CH_2 - O & CH_2 \end{bmatrix}$$

$$CH_2 - CH_2 - CH_2 - O $

CRN 98312-09-5 CMF (C2 H4 C)n (C2 H4 O)n C29 H3+ N2 C8 CCI PMS

CRN 95615 67:1 4

CMF (C2 44.0) n C14 H20 N2 O7 CUI PMS

PAGE 1 - B

CRN 2680-03 7

CRN 868-77-9 CMF C6 H10 O3

RN 163068 30-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[(heptadecafluorooctyl)oxy]carbonyl]a
mino]ethyl ester, polymer with N.N-dimethyl-2-propenamide,
α,α'-[(\*\*:methylethylidene)di-4,1 phenylene)bis[ω\*
[[[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]amino]carbonyl]oxy]poly(ox
y-1,2 cthanediyl)], α [[[2-[(2-methyl 1-oxo-2propenyl\*(oxy]ethyl]amino]carbonyl]-ω-methoxypoly(oxy-1,2ethanediyl) and α-[[[2-[(2-methyl-1-oxo-2propenyl)oxy]ethyl]amino]carbonyl]-ω-[[[[2-[(2-methyl-1-oxo-2propenyl)oxy]ethyl]amino]carbonyl]oxy]poly(oxy-1,2-ethanediyl) (9CI)
(CA INDEX NAME)

CM 1

CRN 163068-27-7 CMF C15 H10 F17 N O4

CM · 2

CRN 118881-33-1

CMF. (C2 H4 O)n C8 H13 N O4

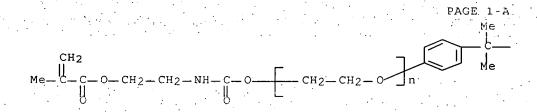
CCI · PMS

$$\text{MeC} = \begin{bmatrix} \text{CH}_2 - \text{CH}_2 - \text{C} & \text{CH}_2 \\ & \text{NH} - \text{CH}_2 - \text{CH}_2 - \text{C} \end{bmatrix} = \begin{bmatrix} \text{CH}_2 \\ & \text{CH}_2 \\ & \text{CH}_2 \end{bmatrix}$$

.CM

CRN 98312-09-5

CMF (C2 H4 O)n (C2 H4 O)n C29 H34 N2 O8



PAGE 1-B

CM 4

CRN: 95615-67-1.

CMF (C2 H4 O) n C14 H26 N2 O7

CCI PMS

PAGE 1-6

CM !

CRN 2680-03-7 CMF C5 H9 N O

RN 163068-31-3 HCAPLUS 
2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with  $\alpha,\alpha'$ -[(1-methylethylidene)di-4,1-phenylene]bis[ $\omega$ -[[[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]amino]carbonyl]oxy]poly(ox y-1,2-ethanediyl)],  $\alpha$ -[[[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]amino]carbonyl]- $\omega$ -methoxypoly(oxy-1,2-ethanediyl) and  $\alpha$ -[[[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]amino]carbonyl]- $\omega$ -[[[[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]amino]carbonyl]oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

.CRN 118889-33-1

CMF (C2 H4 C)n C8 H13 N O4

CCI FMS

MeO — 
$$\begin{bmatrix} CH_2 - CH_2 - O \end{bmatrix}$$
  $\begin{bmatrix} CH_2 \\ D \end{bmatrix}$   $\begin{bmatrix} CH_2 - CH_2 - CH_2 - CH_2 - CH_2 - CH_2 - CH_2 \end{bmatrix}$ 

 $CM \sim 2$ 

CRN 98312-09-5

CMF (C2 H4 O)n (C2 H4 O)n C29 H34 N2 O8

CCI PMS

PAGE 1-B

-CM

CRN 95615-67-1

CMF (C2 H4 O)n C14 H20 N2 O7

CCI PMS

PAGE 1-B

CM . 4

CRN 868-77-9 CMF C6 H10 O3

- IC TCM C08F282-06
- ICS G02B001-04
- CC 35-4 (Chemistry of Synthetic High Polymers)
- Section cross reference(s): 38, 63
- IT Lenses
- (contact, crosslinked polymer hydrogels for soft contact lenses)
- IT 163068-2873P 163068-29-9P 163068-30-2P.
  - 163068-31-32

(crosslinked polymer hydrogels for soft contact lenses)

124 ANSWER 36 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

#### 10/549,696

ACCESSION NUMBER:

1995:385949 HCAPLUS Full-text'.

DOCUMENT NUMBER: -

122:142637

TITLE:

molds for manufacturing plastic lenses having high

transparency and sealing spacers for the molds

Miura, Yoshihiro; Taki, Kazuya; Niikura, Hiroshi Nippon Kogaku Kk, Japan INVENTOR(S): PATENT ASSIGNEE(S):

SOURCE:

Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06155489	д Д	19940603	JP 1992-315579	19921102
			<	
PRICRITY APPLN, INFO.	:		JP 1992-315579	19921102

Entered STN: 03 Mar 1995

Molds for manufacturing plastic lenses comprise a mating pair of plates with sealing spacers, wherein the spacer contains polyethylene, polyacetal, polyamide, poly(ethylene phthalate), polypropylene, and/or polytetrafluoroethylene. A hardenable liquid composition [containing e.g. 2,2'-bis(4-methacryloxyethoxy-3,5-dibromophenyl)propane and styrenel is poured into a gap between the plates to form lenses having high transparency.

IT: 85583-94-4P

> (molds for manufacturing plastic lenses having high transparency and sealing spacers for the molds)

85583-94-4 HCAPLUS

2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis[(2,6-dibromo-4,1phenylene oxy-2,1-ethanediyl ester, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

·CRN 67006-39-7 CMF C27 H28 Br4.06

CM:

CPN 100-42-5 CMF C8 H8

H 2 C == CH -- Ph

ICM B29C039-26

```
ICS B29C033-38; B29C033-76; G02B001-04; G02C007-02
    B29K105-32, B29L011-00
CC
    63-7 (Pharmaceuticals)
    Section cross-reference(s): 38
IT
    Lenses
        (molds for manufacturing plastic lenses having high transparency and
       sealing spacers for the molds)
                                         9002-88-4P 9003-07-0P.
IT
    9002-84-0P, Polytetrafluoroethylene
    Polypropylene 25610-19-9P, Poly(ethylene phthalate)
     85583-94-4P 161249-82-7P
       (molds for manufacturing plastic lenses having high transparency and
       sealing spacers for the molds)
L24 ANSWER 37 OF 49
                     HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                        1995:364159 HCAPLUS Full-text
                        122:142654
DOCUMENT NUMBER:
                        Manufacture of eyeqlass lenses with high dyeing
TITLE:
                        affinity and refractive index
                        Honda, Tomoji, Kaetsu, Isao
INVENTOR (S):
                        Tokvo Keikaku Kk, Japan
PATENT ASSIGNEE(S):
                        Jpn. Kokai Tokkyo Koho, 5 pp.
SOURCE:
                        CODEN: JKXXAF
DOCUMENT TYPE:
                       Patent
LANGUAGE:
                       Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO. KIND
                              DATE
                                         APPLICATION NO.
                                                                 DATE
                        JP 06289334
                      A 19941018
                                         JP 1993-100096
                                                                 19930405
PRIORITY APPLN. INFO.:
                                          JP 1993-100096
                                                                19930405
ED Entered STN: 22 Feb 1995.
    The plastic lenses are prepared by radical copolymn. of 30-80 weight%
     dimethacryl ester derivs. (e.g. 2,2-bis[4- (methacryloxyethoxy) phenyl] propane)
     and 10-50 weight? bifunctional methacryl ester derivs. (e.g. 2,2-bis[4-
     (methacryloxytriethoxy) phenyl] propane) as crosslinking agents and monomers.
     The eyeglass lenses have high dyeing affinity and refractive index.
    138551-37-8P 161034-60-2P
        (manufacture of eyeglass lenses with high dyeing affinity and refractive
       index)
    138551-37-8 HCAPLUS .
RN
    2:Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-
    (2,1) ethanediyl) ester, polymer with \alpha,\alpha' = [(1-1)]
    methylothylidene)di-4,1-phenylenelbis[0-[(2-methyl-1-cxo-2-....
    propenyl)oxy[poly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX NAME)
    CM: 1
    CRN 41637-38-1
    CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4
    CCI PMS
```

#### PAGE 1-B

CM:

CRN 24448-20-2 CMF C27 H32 Q6

RN 161034-60-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) ester, polymer with (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyloxy-2,1-ethanediyloxy-2,1-ethanediyl) bis(2-methyl-2-propenoate) (9CI). (CA INDEX NAME)

:CM 1

CRN 56744-46-8 CMF C35 H48 O10

PAGE 1-B

CM

CRN 24448-20-2 CMF-C27 H32 O6

IC ICM G02C007-04

ICS C08F299-02

CC 63-7 (Pharmaceuticals)

IT Lenses

(eyeglass, manufacture of eyeglass lenses with high dyeing affinity and refractive index)

138551-37-8P 161034-60-2P

(manufacture of eyeglass lenses with high dyeing affinity and refractive index)

L24 ANSWER 38 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1995:347022 HCAPLUS Full-text

DOCUMENT NUMBER: 122:115031

TITLE: Manufacture of plastic eyeglass lenses with high

refractive index and good dyeability

INVENTOR (S): Honda, Tomoji; Kaetsu, Isao

PATENT ASSIGNEE (S): Tokyo Keikaku Kk, Japan ... SOURCE:

Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
. •				ال والمنظم المنظم والمنطوع المنظم	
•	JP 06308434	. ** A *	19941104	JP 1993-114295	1,9930419
				<	
PRIO!	RITY APPLN. INFO.:			JP 1993-114295	19930419

ED Entered STN: 11 Feb 1995

The title lenses are prepared by radical cast polymerization of a composition Containing 30-80 parts of CH2:CXCO(OCH2CH2)nO-p-C6H4-CMe2-p-C6H4-O(CH2CH2O) nCOCX: CH2 (I; X = H, Me; n = (1-8), 10-50 parts of

### 10/549,696

CH2:CXCO2CH2CH(OH)CH2OCH2CHMeO-p-C6H4-CMe2-p-C6H4-OCHMeCH2OCH2CH(OH)CH2OCOCHX:CH2 (II; X=H, Me), and 10-50 parts of copolymerizable monomer. For example, a lens prepared from a copolymer of I (X=Me, N=2), II (X=H), N=10-methylstyrene, and divinylbenzene showed a refractive index 1.564 and a visible light transmission rate 90%. After immersion of the lens in a solution of Dispersion Brown 3 for 10 min, the visible light transmission rate became 36%, demonstrating its good dyeability. 160819-24-9P 160819-25-0P

(manufacture of plastic eyeglass lenses with high refractive index and good dyeability)

RN 160819-24-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with diethenylbenzene, (1-methylethenyl)benzene and (1-methylethylidene)bis[4,1-phenyleneoxy(2-methyl-2,1-ethanediyl)oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate (9CI) (CA INDEX NAME)

CM I

IT

CRN 120123-32-2 CMF C33 H44 O10

PAGE 1-A

Me

H2C=CH-C+0-CH2-CH-CH2-CH-0

Me

Me

PAGE 1-B

CM 2

CRN 56744-60-6 CMF C31 H40 08

PAGE 1-B

CM 3

CRN 1321-74-0 CMF C10 H10 CCI IDS



CM 4

CRN 98-83-9 CMF C9 H10

RN 160819-25-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis[4,1-phenyleneoxy(2-methyl-2,1-ethanediyl)oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with diethenylbenzene, (1-methylethenyl)benzene and (1-methylethylidene)bis(4,1-phenyleneoxy-3,6,9,12-tetraoxatetradecane-14,1-diyl) di-2-propenoate (9CI) (CA INDEX NAME)

CM :

CRN 118443-66-6 CMF C41 H60 O14

PAGE 1-A

PAGE 1-B

PAGE 1-C

CM 2

CRN 83900-58-7 CMF C35 H48 O10

H2C O OH Me Me Me Me Me O-CH-CH2-O-CH2-CH-O Me

PAGE 1-B

CM . 3

CRN 1321-74-0 CMF C10 H10 CCI IDS



## 

CM 4

CRN 98-83-9 CMF C9 H10

CH2 Ph-C-Me

IC ICM G02C007-02

ics C08F299-02; G02B001-04

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 38

IT Lenses

(eyeglass, manufacture of plastic eyeglass lenses with high refractive index and good dyeability)

IT 160819-24-9P 160319-25-0P

(manufacture of plastic eyeglass lenses with high refractive index and good dyeability)

124 ANSWER 39 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:306828 HCAPLUS Full-text

DOCUMENT NUMBER: 122:89405

TITLE: Polymeric ophthalmic lens with crosslinker

containing saccharide residue

INVENTOR(S): Molock, Frank F.; Nunez, Lyan M.; Ford, James D.;

Elliott, Laura D.

PATENT ASSIGNEE(S): Johnson and Johnson Vision Products, Inc., USA

SOURCE: Eur Pat Appl 16 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English.

FAMILY ACC. NUM. COUNT: 1.

PATENT INFORMATION:

PATENT NO.	KIND DATE APPLICATION NO.	DATE
EP 620455	A2 19941019 EP 1994-302524	19940411
EP 620455	A3 19950802	
EP 620455 R: AT, BE, C	B1 20001220 CH, DE, DK, ES, EP, GB, LE, IT, LI, LU, NL,	
IL·109221	A 19930405 ÎL 1994-109221 <	19940405
CA 2120892	A1 19941013 CA 1994-2120892	19940408

## 10/549,696

	,			<	
AU 9459401	Α	19941013	AU	1994-59401	19940411
AU 693777	B2	19980709	•	<	
FI 9401658	Α.	19941013	FI	1994-1658	19940411
NO 9401299	A	19941013	NO	< 1994-1299	19940411
BR 9401462	A	19941227		< 1994-1462	•
BR 9401462	A	19941227	BR	1994-1462	19940411
ZA 9402478	Α	19951011	ZA	1994-2478	19940411
AT 198234	T.	20010115	АТ	1994-302524	19940411
JP 06345982	Α	19941220	JP	< 1994-97020	19940412
CN 1100110	A	19950315	CN	1994-105291	19940412
CN 1063551		20010321	 	<b>~~</b>	
HU 67922	A2	19950529	HU	1994-1040	19940412
HU 214634	В	19980428			
US 5690953	Α	19971125	US	1996-712657	19960913
PRIORITY APPLN. INFO.:			US	1993-17709	A 19930412
			ບຮ	 1993-164504	B1 19931209
			US	1,995 409385	B1 19950323

ED Entered STN: 24 Jan 1995

AB An ophthalmic lens, particularly a soft hydrogel contact lens, is made from a crosslinked polymer made by reacting a hydrophilic monomer with a crosslinking amount of a polyfunctional compound containing a saccharide residue. The preferred hydrophilic monomer is a mixture of the following individual hydrophilic monomers: (a) the reaction product of a free radical reactive monoisocyanate and a monoalkoxy polyalkyl ether, (b) N.M-dimethylacrylamide, and optionally (c) hydroxyethyl methacrylate. The preferred polyfunctional compound is a prepolymer derived from an alkoxylated glucose or sucrose. Thus, hydroxyethyl methacrylate 94.60, Glucam E 20-PEG 1000 (preparation given) 5.0, and Darocur-1173 0.40% was mixed under reduced pressure and exposed to UV light at 60° and polymerized in molds to obtain contact lenses.

(polymeric ophthalmic lens with crosslinker containing saccharide residue)

RM 160422-13-9 HCAPLUS

CN 2-Propendic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with 2,4 dispeyanato-1 methylbenzene, a hydro-a-

hydroxypoly(oxy-1,2-ethanediyl), a-hydro-w-hydroxypoly(oxy-

1,2-ethanediyl) ether with methyl \$-D-qlucopyranoside (4:1),

2-isocyanatoethyl 2-methyl-2-propenoate u, a - (1)

methylethylidene) di-4,1-phenylene] bis  $\{\omega - [[[2-1(2-methyl-1-oxo-2-propenyl) oxy]ethyl] amino] carbonyl] oxyl poly <math>\{oxy-1,2-ethanediyl\}\}$  and  $\alpha - [[2-[(2-methyl-1-oxo-2-propenyl) oxy]ethyl] amino] carbonyl] - <math>\omega$ -methoxypoly  $\{oxy-1,2-ethanediyl\}$   $\{9CT\}$   $\{CA,INDEX,NAME\}$ 

CM: 1

CRN 118889-33-1

CMF (C2 H4 O)n C8 H13 N O4 CCI PMS

$$MeO = \begin{bmatrix} CH_2 - CH_2 - O \end{bmatrix}_n \begin{bmatrix} C \\ C - NH - CH_2 - CH_2 - O \end{bmatrix} C CH_2 CH_2 - C - Me$$

CM 2

CRN 98312-09-5

CMF -(C2, H4, O) n (C2, H4, O) n C29, H34; N2, O8

CCI PMS

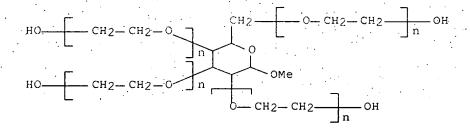
PAGE 1 B

$$\begin{array}{c|c} C + CH_2 - CH_2 - \frac{1}{n} & O - C - NH - CH_2 - CH_2 - O - C - C - Me \\ \hline \\ N + \frac{1}{n} & O - \frac{1}{n} &$$

CM 3

CRT 68239-42-9 CMF (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n (C7 H14 O6

CCI PMS



CRN 30674-80-7 CMF C7 H9 N O3

CM 5

CRN 25322-68-3 CMF (C2 H4-0)n H2 O CCI PMS

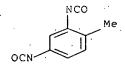
$$HO = \begin{bmatrix} CH_2 - CH_2 - C & \\ & n \end{bmatrix} H$$

CM ·

CRN: 868-77.9. CMF: C6-H10-03

CM: 7

CRN 584-84-9 CMF C9 H6 N2 O2



IC ICM G02B001-04

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 35, 38

IT Lenses

(contact, polymeric ophthalmic lens with crosslinker containing saccharide residue)

IT Lenses

(contact, soft, polymeric cphthalmic lens with crosslinker containing saccharide residue)

IT Lenses

(intraocular, polymeric ophthalmic lens with crosslinker containing saccharide residue)

TT 160422-11-7P 160422-11-7P 160422-12-8P 160422-13-9P

(polymeric ophthalmic lens with crosslinker containing saccharide residue)

L24 ANSWER 40 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:294397 HCAPLUS Full-text

DOCUMENT NUMBER: 122:89517

TITLE: manufacture of intraocular lenses with copolymers

INVENTOR(S): Miura, Morikazu, Hatsutori, Yasuko

PATENT ASSIGNEE(S): Asani Chemical Ind. Japan SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC: NUM. COUNT: 1

PATENT INFORMATION:

	PAT	ENT NO:		KIND	DATE		APPLICATI	ON NO.		DATE	: "
								- 4		o intigration	
	JP	0628514	17	A	199410	11	JP 1993-8	30578	•	199304	07
	· ·						<-	_			
r O F	YTT S	APPLN	INFO.:				TP 1993-9	30578		1.99304	07.

ED Entered STN: 14 Jan 1995

(17

H<sub>3</sub>C

H<sub>3</sub>C

$$CH_2 - CH_2 = CH_2 = CH_2$$
 $CH_3 - CH_2 = CH_2 = CH_2$ 
 $CH_3 - CH_2 = CH_2 = CH_2 = CH_2$ 
 $CH_3 - CH_2 = CH_2 = CH_2 = CH_2$ 

Intraocular lenses are manufactured with copolymers containing arm. group, alkyl group, ethylene glycol unit, and ester group, having Tg = 40-80° as determined from Tan $\delta$  values by the dynamic viscosity tests, having Tg  $\leq$  40° as determined by the differential heat anal., and having refractory index  $\geq$  1.5. Thus, styrene, Bu acrylate, and bisphenol A derivative I were subjected to photocopolymn. and made into intraocular lenses, which are foldable and which can be inserted in to eyes through a smaller cut.

IT 160605-82-3P

CN

(manufacture of intraocular lenses with copolymers)

RN 160605-82-3 HCAPLUS

2-Propenoic acid, butyl ester, polymer with ethenylbenzene and  $\alpha, \alpha'$ -[(1-methylethylidene)di-4,1-phenylene]bis[ $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM · 1

CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 C4

CCI PMS

CH2 0 CH2

PAGE 1-B

ÇM 2

CRN 141-32-2 CMF C7 H12 O2

CRN 100-42-5 CMF C8 H8

H2C = CH-Ph

IC ICM A61L027-00

ICS A61F002-16; C08F212-06; C08F220-18

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 38

IT Lenses

(intraocular, manufacture of intraocular lenses with copolymers): 79-10-7DP, Acrylic acid, copolymers 79-41-4DP, Methacrylic acid,

copolymers 80-05-7DP, Bisphenol A, derivs, copolymers 100-42-5DP, Styrene, copolymers 160605-82-3P

(manufacture of intraocular lenses with copolymers)

L24 ANSWER 41 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1993:525251 HCAPLUS Full-text

DOCUMENT NUMBER: 119:125251

TITLE: Antimicrobial polymerizable composition, the

polymer and article obtained from the same INVENTOR(S): Imazato, Satoshi; Torii, Mitsuo; Tsuchitani,

Yasuhiko; Nishida, Koji; Yamauchi, Junichi

PATENT ASSIGNEE(S): Kuraray Co., Ltd., Japan

SOURCE: Eur Pat Appl., 32 pp. CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION: ..

PATENT NO.	KIND	DATE	APPLICATION NO.	
EP 537774	A1		EP 1992-117741	19921016
EF 537774 F: DE, FR, G JP 06009725	B, IT, N		JP 1992-274577 <	19921013
JF 3357094 US 5408022	E2 A	20021216 19950478	US 1992-362736	19921019
US 5494987	Α	19960227	US 1995-271369	19950111
PRIORITY APPLN. INFO.:			JP 1991 299958	A 19911018
	* *		US-1992-962736	A1 19921019

ED Entered STN: 18 Sep 1993

G.I.

 $H_2C = C (Me) CO_2 (CH_2)_{12} N^{\frac{1}{2}}$  Br

AB A polymer having permanent antimicrobial property is prepared from an ethylenically unsatd. monomer, a specific monomer having antimicrobial activity, and a polymerization initiator. A dental composite was prepared from 17 parts of a mixture containing Bis-GMA 70, triethylene glycol dimethacrylate 20, pyridinyl group-containing methacrylate (I) 2, camphorquinone 1, and dimethylaminoethyl methacrylate 2 parts and 83 parts of a silane-treated quartz. Bactericidal activity of the composite was in vitro tested against Streptococcus mutans.

IT 148753-81-5P 148753-83-7P 148753-85-9P 148753-87-1P 148753-89 3P 148779-55-9P

(preparation and antimicrobial activity of, for dental and medical goods)

RN 148753-81-5 HCAPLUS

CN Pyridinium, 1-[12-[(2-methyl-1-oxo-2-propenyl)oxy]dodecyl], bromide, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 1,2-ethanediylbis(oxy-2,1-ethanediyl) bis(2-methyl-2-propenoate) and (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 148753-80-4 CMF C21 H34 N O2 Br

Br -

CM 2

CPN 2857-47-2 CMF C8 H15 N 02

 $\begin{array}{c} \text{O} \quad \text{CH}_2 \\ \text{NG}_2 \text{N} + \text{CH}_2 + \text{CH}_2 + \text{CH}_2 + \text{C} + \text{C} + \text{C} + \text{Me} \end{array}$ 

CM: 3

CRN 1565-94-2 CMF C29 H36 O8

PAGE 1-A

PAGE, 1 -.B

CM 4

CRN 109-16-0 CMF C14 H22 O6

RN, 148753-83-7 HCAPLUS

CN Benzenemethanaminium, N.N-dimethyl-N-[12-](2-methyl-1-cxo-2-propenyl)exyldodecyll-, bromide, polymer with 2-dimethylemino)ethyl 2-methyl-2-propenoate, 1,2-ethanediylbis(oxy-2,1-ethanediyl) bis(2-methyl-2-propenoate) and (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bis(2-methyl-2-propenoate) (9CT) (CA INDEX NAME)

: CM : i

CRN 148753-82-6 CMF C25 H42 N O2 Br

● Br

CRN 2867-47-2 CMF C8 H15 N O2

CM . 3

CRN 1565-94-2 CMF C29 H36 O8

CM 4

CRN: 109-16-0 CMF C14 H22 O6

RN 148753-85-9 RCAPLUS

PAGE 1-B

# 10/549,696

piperidinyl]ethyl 2-methyl-2-propenoate hydrochloride (9CI) (CA INDEX NAME)

CM 1

CRN 148753-84-8

CMF C19 H35 N O2 . C1 H

♣ HCl :

ÇM 2

CRN 2867-47-2 CMF C8 H15 N O2

CM 3

CRN 1565-94-2 CMF C29 H36 O8

.PAGE I B

CH<sub>2</sub>

CRN 109-16-0 CMF C14 H22 O6

RN 148753-87-1 HCAPLUS

Pyridinium, 1-[12-[(1-oxo-2-propenyl)oxy]dodecyl]-, bromide, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 1,2-ethanediylbis(oxy-2,1-ethanediyl) bis(2-methyl-2-propenoate) and (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)]bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM .

CRN 148753-86-0 CMF C20 H32 N O2 Br

🖀 Bṛ -

CM 3

CRN 2367-17-2 CMF C8 H15 N O2

CM :

CRN 1565-94-2

CMF C29 H36 O8

PAGE 1-B

CM· 4

CRN 109-16-0 CMF C14 H22 O6

H2C O O CH2 
$$H_2 = H_2 $

RN 148753-89-3 HCAPLUS

CN: 1-Dodecanaminium, N.N.N-tris[2-[(2-methyl-1:oxo-2-propenyl)oxy]ethyl]chloride, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate,
1,2-ethanediylbis(oxy-2,1-ethanediyl) bis(2-methyl-2-propenoate) and
(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)]
bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM

©RN 148753-86-2 CMF C30 H52 N O6 . C1

C1 -

CRN 2867-47-2 CMF C8 H15 N O2

CM 3

CRN 1565-94-2 CMF C29 H36 O8

PAGE 1-B

CM

CRN 109-16-6 CMF C14 H22 O6

RN - 118779-55-9 HCAPLUS

CN Benzenemethanaminium, N-dodecyl-N,N-bis[2-!(2-methyl-1.oxo-2-propenyl)oxylethyl]-, chloride, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 1,2-ethanediylbis(oxy-2,1-ethanediyl) bis(2-methyl-2-propenoate) and (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bis(2-methyl-2-propenoate)

(9CI) (CA INDEX NAME)

CM 1

CRN 148779-54-8

CMF C31 H50 N O4 . C1

$$^{\rm H2C}$$
 O  $^{\rm (CH_2)_{11}-Me}$   $^{\rm Me-C-C-O-CH_2-CH_2-N+CH_2-Ph}$  O  $^{\rm CH_2}$   $^{\rm CH_2-CH_2-C-C-Me}$ 

• 🚯 C1 -

CM 2

CRN 2867-47-2 CMF C8 H15 N O2

CM 3

CRN 1565-94-2 CMF C29 H36 O8

PAGE 1 - D

CM

109-16-0 CMF C14 H22 O6

-С-С-о-сн2-сн2-о-сн2-сн2-о-сн2-сн2-о-с

ICM A61K006-083

ICS A61L027-00; A61L029-00; A61L017-00; A61L015-24

CC 63-7 (Pharmaceuticals)

IT Lenses

(contact, soft, antimicrobial quaternary ammonium group-containing methacrylate copolymers for)

142753-81-5P 148753-83-7P 148753-85-9P

148753-87-1P 148753-83-3P 148753-91-7P

148753-92-8P 148753-93-9P 148753-94-0P 148779-55-9P

149699-07-0P 150363-86-3P

(preparation and antimicrobial activity of, for dental and medical goods)

L24 ANSWER 42 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1992:28228 HCAPLUS Full-text

DOCUMENT NUMBER: 116:28228

TITLE: Contact lenses made of vinylsilane copolymers

INVENTOR(S): Gruber, Erich; Schaefer, Horst; Seiferling, Bernard; Mueller von der Haegen, Harro

Ciba-Geigy A.-G., Switz. Eur. Pat. Appl., 20 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

	PATENT NO.	KIND DATE	APPLICATION NO.	DATE
	EP 455587	Al 19911106	EP 1991-810301	19910423
	EP 455587		<	.,,
	ES 2074687		, GR, IT, LI, LU, NL, S ES 1991-810301	
	US 5196493	N 19930323	< US 1991-691626	19910425
•	AU 9175970	A 19911107	AU 1991-75970	19910426
•	AU 645800 IL 97978	B2 19940127 A 19941229	< IL 1991-97978	19910428
•	CA 2041494	A1 19911103	<pre>&lt; CA 1991-2041494 </pre>	19910430
	JP 05306309	A 19931119	VP 1991-128180	10910502
	US 5264878	A 19931123	US 1993-6085	19930119
PRIO	RITY APPLN. INFO.:		CH 1990-1479 .A	19900502

US 1991-691626 A3 19910425.

ED Entered STN: 24 Jan 1992

AB Contact lenses are made of polymers comprising: monovinylsilane 20-60, oligovinylsilane 1-25, fluorinated vinyl compound 10-55, hydrophobic vinyl compound with bulky hydrocarbon residue 3-30, hydrophilic vinyl compound 0-10, and addnl. crosslinking vinyl compds. 0-15%. A polymer was prepared from tris(trimethylsiloxy)silylpropylmethacrylate 30, 3,5-bis(3-methacroyloxypropyl)-3,5-bis(trimethylsiloxy)-1,1,1,7,7,7-hexamethyltetrasiloxane 10, 2,2,2-trifluoroethyl methacrylate 30 and 3,3,5-trimethylcyclohexyl methacrylate 30% using 0.1% benzoin ether photoinitiator. The lenses made of the polymers are 0-permeable.

IT 138273-05-9P

(preparation of, for contact lenses)

RN 138273-05-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with (1,1,3,3-tetramethyl-1,3-disiloxanediyl)di-3,1-propanediyl bis(2-methyl-2-propenoate),
2,2,2-trifluoroethyl 2-methyl-2-propenoate, [2,2,2-trifluoro-1-(trifluoromethyl)ethylideneldi-4,1-phenylene bis(2-methyl-2-propenoate), 3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxany 1]propyl 2-methyl-2-propenoate and 3,3,5-trimethylcyclohexyl 2-methyl-2-propenoate (9GI) (CA INDEX NAME)

CM 1

CRN 108050-42-6 CMF C23 H18 F6 O4

CM · 2

CRN 18547-93-8 CMF C18 H34 O5 Si2

CM 3

CRN 17096-07-0

## CMF C16 H38 O5 Si4

CM 4

CRN 7779-31-9 CMF C13 H22 O2

CM 5

CRN 352-87-4 CMF C6 H7 F3 O2

CM 6

CRN 79-41-4 CMF C4 H6 O2

TC ICM C08F230-08

ICS C08F220-22; G02B001-04.

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 38

IT Lenses

### 10/549,696

(contact, vinylsilane-acrylate copolymers for)
IT 138251-33-9P 138251-34-0P 138251-36-2P 138251-38-4P 138251-39-5P 138251-40-8P 138251-41-9P 138273-05-9P

138273-06-0P 138273-07-1P

(preparation of, for contact lenses)

L24 ANSWER 43 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:520121 HCAPLUS Full-text

DOCUMENT NUMBER: 115:120121

TITLE: Manufacture of contact lenses that contain water

INVENTOR(S): Seshima, Yasuji; Ono, Takashi; Ito, Toshiyuki;

Mitsuyama, Hideo

PATENT ASSIGNEE(S): Seed K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUACE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.		KIND DATE	APPLICATION NO.	DATE
والمراكبة والمركب والمراكب الأرار				
JP 03114019		A 199105:	15 JP 1989-252915	19890928
CRITY APPLN. T	NFO		TP 1989-252915	19890928

ED Entered STN: 23 Sep 1991

AB A soft contact lens, which contains water, is prepared from a copolymer consisting of methacrylic acid moncester of polyhydric alc. 50-90, and CR1R2[(p-C6H4)O2CNH(CH)nR3][(p-C6H4))2CNH(CH2)nR4] (R1,R2 = F, C1-8 fluoroalkyl, alkyl; R3,R4 = acryloyloxy, methacryloyloxy, styryloxy; n = 1-5) 0.3-20% by weight This polymeric material is machinable. Thus, 2-hydroxyethyl methacrylate, 2-hydroxypropyl methacrylate, N-pyrrolidone, and 2,2-bis[4-[N-(2-methacryloyloxyethyl)carbamoyl]phen yl]hexafluoropropane were mixed and polymerized in the presence of azobis(isobutyronitrile) and made into a contact lens.

IT /135803-15-5P

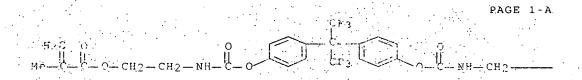
(preparation of, for contact lens)

RN 135800-15-5 HCAPLUS

CN 2-Propencic acid, 2-methyl-, [2,2,2-trifluoro-1 (trifluoromethyl)ethylidene]bis(4,1-phenyleneoxycarbonylimino-2,1 cthancdiyI) ester, polymer with 1-ethenyl 2-pyrrolidinone,
 2-Hydroxyethyl 2-methyl-2-propenoate and 2-hydroxypropyl
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 133881-02-4 CME C29 H28 F6 N2 O8



PAGE 1-B

CM .

CRN 923-26-2 CMF - C7 H12 O3

. CM 3

CRN 868-77-9 CMF C6 H10 03

CM

CRN 88-12-0 CMP CG HP N O

- IC ICM G02C007-04
- CC 63-7 (Pharmaceuticals)
  Section cross-reference(s): 37
- (contact, manufacture of, with acrylic acid derivative copolymers)
- 135803-15-5P
  - (preparation of, for contact lens)

#### 10/549,696

L24 ANSWER 44 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1990:637876 HCAPLUS Full-text

DOCUMENT NUMBER: 113:237876

TITLE: Manufacture of soft lens materials

INVENTOR(S): Toyoshima, Nobuyuki; Hirashima, Atsushi; Shibata,

Takanori

PATENT ASSIGNEE(S): Menicon Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02079014	Α	19900319	JP 1988-231054	19880914

JP 2588945 B2 19970312

PRIORITY APPLN. INFO.: JP 1988-231054 19880914

ED Entered STN: 22 Dec 1990

AB A soft optical lens is prepared from copolymers consisting of (1) F-containing (meth) acrylic acid ester, (2) alkyl (meth) acrylic acid ester (with glass transition temperature ≤40° as homopolymer), and (3) F-containing (meth) actylate polymer. The copolymers may contain a crosslinking agent. The lens may be contact lens, intraocular lens, or artificial cornea. Thus, a lens was prepared by copolymg. 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-heptadecafluorodecyl methacrylate 42.5, Bu acrylate 42.5, trifluoroethyl methacrylate-ethylene glycol dimethacrylate copolymer (a macromer) 15.0, and ethylene glycol dimethacrylate (a crosslinking agent) 0.5 parts by weight in the presence of initiator 0.5 part azobisdimethylvaleronitrile.

IT 130759-41-0P 130759-42-1P 130759-43-2P 130759-44-3P

(preparation of, for contact lenses)

RN 130759-41-0 HCAPLUS

2-Properoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with butyl 2-methyl-2-propencate, butyl 2-propencate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-properoate, trifluoroethyl 2-methyl-2-propencate and [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]di-4,1-pnenylene bis(2-methyl-2-propencate) (9CI) (CA INDEX NAME)

CM . 1.

CRN 108050-42-6 CMF C23 H18 F6 O4

$$\begin{array}{c} \text{H2} \\ \text{Me} \\ \text{ } \\$$

RN 130759-42-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with butyl 2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate, methyl 2-methyl-2-propenoate, trifluoroethyl 2-methyl-2-propenoate and [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]di-4,1-phenylene bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 108050-42-6 CMF C23 H18 F6 O4

CM 2

CRN 38785-10-3 CMF C6 H7 F3 O2 CCI IDS

3 (D1\_F)

CM :3

CRN 27905-45-9 CMF C13 H7 F17 O2

CM · 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 97-90-5 CMF C10 H14 O4

CM 6

CRN 80-62-6 CMF C5 H8 O2

PN

130759-43-2 HCAPLUS

2-Propenoic acid, 2-methyl., 1.2-ethanedlyl ester, polymer with butyl 2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-beptadecafluorodecyl 2-propenoate, 2-propenoic acid, trifluoroethyl 2-methyl-2-propenoate and [2,2,2-trifluoro-1-(trifluoromethyl)ethylideneldi-4,1-phemolene bis(2-methyl-2-propenoate) (GA INDEX NAME)

CM 1

CRN 108050-42-6 CMF C23 H18 F6 O4

CRN 38785-10-3 CMF C6 H7 F3 O2

CCI IDS

3 (D1--F)

CM: 3

CRN 27905:45-9 CMF C13 H7 F37 O2

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 97-90-5 CMF C10 H14 O4

CRN 79-10-7 CMF C3 H4 O2

RN 130759-44-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with butyl 2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate, trifluoroethyl 2-methyl-2-propenoate and [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]di-4,1-phenylene bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 108050-42-6 CMF C23 H18 F6 O4

CM 2

CRN 38785-10-3 CMF C6 H7 F3 02 CCI TDS

4.101 -F 3

CM: 3

CRN 27905-45-9 CMF C13 H7 F17 O2

CRN. 141-32-2 CMF C7 H12 O2

n-BuO-C-CH-CH2

CM

CRN 97-90-5 CMF C10 H14 O4

Me - C - C - C + 2 + C + 2 + O - C - Me

IC - ICM G02C007-04 -

ICS C08F220-12; C08F220-22; C08F299-00

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 37

Lenses

(contact, manufacture of, fluorine-containing acrylic copolymers for)

IT : 130759 38 5P | 130759-39-6P | 130759-40-9F 130759-41-0F -

130759-42-1P: 130759-43-2P 130759-44-3P

130759-45-4P

(preparation of, for contact lenses)

124 ANSWER 45 OF 49 HCAPLUS COPYRIGHT 2007 ACS On STN 1987:38506 HCAPLUS Full-text ACCESSION NUMBER

DOCUMENT NUMBER: 106:38506

Contact lens containing a high concentration of

Tarumi, Jiro; Komiya, Shigeo; Sawamoko; Takeyuki INVENTOR (S):

PATENT ASSIGNEE (S): .

Hoya Corp., Japan Jpn. Kokai Tokkyo Koho, 7 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUACE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND APPLICATION NO. DATE

10/549,696

JP 61166516

19860728

JP 1985-5789

19850118

JP 08033528

B 19960329

PRIORITY APPLN. INFO.:

JP 1985-5789

19850118

ED Entered STN: 07 Feb 1987

AB A contact lens with >60% water-absorbability is prepared using copolymers consisting of dimethylacrylamide 50-85, at least one hydrophobic monomethacrylate 15-50, and a crosslinking agent 0.1-3.0% by weight The crosslinking agent is selected from 5 aliphatic compds. such as CH2:CXCO2(CH2CH2O)aOCCX:CH2 where X = H or Me and a = 2-4. Thus, dimethylacrylamide 60, Me methacrylate 40, triethylene glycol dimethacrylate 0.28, and azobis(isobutylnitrile) 0.05 parts by weight were mixed, poured into a mold, and heated 24 h at 50-115° to give a copolymer. A contact lens was made from the copolymer, and the water-absorbability was found to be 71.5%.

IT 106128-05-6 106128-08-9 106128-19-3

106190-76-5

(contact lens preparation from)

RN 106128-05-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl., 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester, polymer with butyl 2-methyl-2-propenoate, cyclohexyl 2-methyl-2-propenoate, N,N-dimethyl-2-propenamide and (1-methylethylidene) bis(4,1-phenyleneoxy-2,1-ethanediyloxy-2,1-ethanediyl) bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 56744-60-6 CMF C31 H40 O8

PAGE 1-A

BACE LE

CM 2

CRN 2680-03-7 CMF C5 H9 N G

CRN 109-16-0 CMF C14 H22 O6

CM: 4

CRN 101-43-9 CMF C10 H16 O2

CM 5

CRN 97-88-1 CMF C8 H14 O2

RN 106128-08-9 HCAPLUS

CN 2-Propencic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with
N,N-dimethyl-2-propenamide and methyl 2-methyl-2-propenate (9CI) (CA INDEX NAME)

CM :

CRN 56744-60-6 CMF C31 H40 C8

PAGE 1-A

PAGE 1-B

CM 2

CRN 2680-03-7 CMF C5 H9 N O

CM 3

CRN 80-62-6 CMF C5 H8 O2

RN 106128-10-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyloxy-2,1-ethanediyl) ester, polymer with butyl 2-methyl-2-propenoate and N,N dimethyl-2 propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 56744-60-6 CMF C31 H40 O8

PAGE 1-A

PAGE 1-B

CM 2

CRN 2680-03-7 CMF C5 H9 N O

CM 3

CRN 97-88-1 CMF C8 H14 O2

RN 106190-76-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester, polymer with cyclohexyl 2-methyl-2-propenoate.

N,N-dimothyl-2-propenamide, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] bis(2-methyl-2-propenoate) and (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl)xy-2,1-ethanediyl) bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRM : 56744-60-6 CMF : C31 H40 O8

PAGE 1-A

PAGE 1-B

CM . 2

CRN 51247-87-1 CMF C17 H28 O6 CCI IDS

3 ( D1\_Me ).

CM 3

CRN 2680-03-7 CMF C5 H9 N C

CM

CRU 109-16-0 CMF C14 H22 O6

ĊRN 101-43-9 CMF C10 H16 O2

IC ICM G02C007-04

ICA C08F220-56

CC . 63-7 (Pharmaccuticals)

IT Lenses

(contact, preparation of, from acrylic polymers) 54116-21-1 106128-04-5 106128-05-6 106128-06-7

106128-07-8 106128-08-9 106128-09-0 106128-10-3

106190-74-3 106190-75-4 106190-76-5

(contact lens preparation from) 

L24 ANSWER 46 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1985:154833 HCAPLUS Full-text

DOCUMENT NUMBER:

102:154833

TITLE:

Acrylic naphthalene derivatives, and polymerizable

composition containing them and polymer for

organic glasses.

INVENTOR(S): Yoshida, Haruo; Tagoshi, Hirotaka

PATENT ASSIGNEE(S): Showa Denko K. K. , Japan SOURCE: Eur. Pat. Appl., 26 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO. DATE
	EP 126397	A2	19841128	ER 1984-105367 19840511
: ; :	EP 126397 38 126397		19861120 19890906	
· · · · · · · · · · · · · · · · · · ·		GB, IT		JP 1983-87515 19830520
	JP 63015257 JP 60001213	B A	19880404 19850107	JP 1983-J07952 19830617
	AU 8428377	A	19841122	< AU 1984-28377 19840518
	AU 581172 RITY APPLN, INFO.:	B2	19890216	JP 11983 - 87545. A. 19830520
·				TD 1983:347952 7 19830417

OTHER SOURCE(S): MARPAT 102:154833

ED Entered STN: 04 May 1985

GΙ

$$CH_2 = CR^1CO_2R^2m$$

Curable monomers I [R1 = H or Me, R2 = CH2CH2O, CHMeCH2O, or CH2CH(OH)CH2O, X = H, Cl, Br, Me, MeO, Ph, or PhO, and m = 1-3] are prepared for use in polymerizable compus. for preparation or organic glasses, especially eyeglass lenses. The monomers have a high refractive index, high b.p., are nontoxic, easily handled, good compatibility with other monomers and excellent curability. The I monomers are combined with other acrylic monomers for preparation of the polymers. α-(β-Acryloyloxyethoxy)naphthalene (II) [95358-30-8] was prepared from α-(β-hydroxyethoxy)naphthalene [711-82-0] and acrylic acid [79-10-7]: Lenses were prepared from a polymer obtained by reaction of II, dipentaerythritol hexacrylate, 2-benzoyl-2- hydroxypropane, Ph3P as yellowing preventing agent, and 2-(2-hydroxy-5-methylphenyl)benzotriazole as UV absorber.

IT 95358-31-9P 95358-32-0P

(preparation of, for contact lenses)

RN 95358-31-9 HCAPLUS

CN 2-Propenoic acid, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) di-2-propenoate and 2-(1-naphthalenyloxy)ethyl-2-propenoate (9CI) (CA INDEX NAME)

CM 3

CRN 95358-30-8 CMF C15 H14 O3

CM 2

CRN 24447-73-7 CMF C25 H28 O6

PAGE 1-B

--- CH ==== CH2

CM · 3

CRN 15625-89-5 CMF C15 H20 O6

RN. 95358-32-0 HCAPLUS

2-Propenoic acid, (1-methylethylidene) bis (4,1-phenyleneoxy-2,1-ethanediyl) ester, polymer with 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 2-(1-naphthalenyloxy)chiyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 95358-30-8 CMF C15 H14 O3

CM 2

CRN 29570-58-9 CMF. C28 H34 O13

CM

CRN 24447-78-7 CMF C25 H28 O6

- CH === CH2

TC . C07C069-54; C08F220-30

CÇ: 63-7 (Pharmaceuticals)

Section cross-reference(s): 37

İΤ Lenses

(eyeglass, naphthalene-containing acrylic monomers for polymerizable

95358-29-5P 95358-31-9P-25359 93 00000 0055858-33-1P

95358-34-2P.

(preparation of, for contact lenses)

HCAPLUS COPYRIGHT 2007 ACS on STN L24 ANSWER 47 OF 49 ACCESSION NUMBER: 1984:56201 HCAPHUS -Full-text

DOCUMENT NUMBER: 100:56891

TITLE: Water-containing contact lenses with high oxygen

permeability
Toyo Contact Lens Co., Ltd., Japan PATENT ASSIGNEE (S): Jpn. Kokai Tokkyo Kobo, 15 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

KIND	DATE	APPLICATION NO.	DATE
Α	19831017	JP 1982-60179	19820410
	•	<	
В	19870721		
	KIND  A B	A 19831017	A 19831017 JP 1982-60179

PRIORITY APPLN. INFO.:

JP 1982-60179 19820410

ED Entered STN: 12 May 1984

AB Water-containing contact lenses with high O permeability are prepared from hydrophilic monomers, hydrophobic monomers and derivs of the ketalized polyhydric alcs. HOCH2(CHOH)nCH2OH (n = 1-5) and subjected to acid treatment. Thus, 2,3-O-isopropylideneglycerol methacrylate, Me methacrylate and N-vinylpyrrolidone were copolymd, and fabricated into contact lenses, which were treated with 2N HCl for 24 h and soaked in distilled H2O for 15 min, in 0.5%. Na2CO3 for 30 min and again in distilled H2O for 15 min. The treated lenses were boiled in 0.9% saline for 1 h to give a product with an O permeability of 2.46 + 10-10 mL.cm/cm2.s. mm Hq.

IT 85266-47-3P 85266-56-4P 85266-57-5P

(preparation of, for contact lenses with high oxygen permeability and water content)

RN 85266-47-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (2,2-dimethyl-1,3-dioxolan-4-yl)methylester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and sulfonyldi-4,1-phenylene bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM · 1

CRN 34049-61-1 CMF C20 H18 Ö6 S

CM 2

CFN 7098-80-8 CMF/ C10 H16 O4

CM- . 3

CRN 868-77-9 CMF C6 H10 O3

CM 4

CRN 80-62-6 CMF C5 H8 O2

RN 85266-56-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, (2-methyl-2-phenyl-1,3-dioxolan-4-yl)methyl 2-methyl-2-propenoate and sulfonyldi-4,1-phenylene bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

.CM . 1

CRN 85266-55-3 CMF C15 H18 O4

CM 2

[CRR] 34049-61-3 CMT] C20 H18 O6 G

CM 3

CRN 868-77-9 CMF C6 H10 O3

CM 4

CRN 142-90-5 . CMF C16 H30 O2

RN 85266-57-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,4-dioxaspiro[4.5]dec-2-ylmethyl ester, polymer with dodecyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and sulfonyldi-4,1-phenylene bis(2-methyl-2-propenoate) (9CL) (CA INDEX NAME)

CM

CRN 85266-53-1 CMF C13 H20 C4

ÇM.

CRN 34049-61-1 CMF C20 H18 O6 S

CM . 3

CRN 868-77-9 CMF C6 H10 O3

CM 4

CRN 142-90-5 CMF C16 H30 O2

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IC G02C007-04; C08F008-12; C08F220-10; C08F220-28
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CC 63+7 (Pharmaceuticals)

IT Lenses

(contact, acrylic polymers for, with high oxygen permeability and water content)

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IT 85266-44-0P 85266-45-1P 85266-46-2P 85266-47-3P 85266-48-4P 85266-51-9P 85266-52-0P 85266-54-2P
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85266-56-4P 85266-57-5P 85266-59-7P 85266-60-0P

88503-97-3P 88503-98-4P 88513-81-9P

(preparation of, for contact lenses with high oxygen permeability and water content)

L24 ANSWER 46 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1983:204457 HCAPLUS Full-text

DOCUMENT NUMBER: 98:204157

TITLE: Contact lenses with high oxygen permeability

PATENT ASSIGNES(S): Loya Lens Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp:

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese.

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE .	APPLICATION NO.	DATE:
JP 57182718	A 19821110	JP 1981-68477	19810507

JP 62039725

B 19870825

PRIORITY APPLN. INFO ::

JP 1981-68477

19810507

ED Entered STN: 12 May 1984

GI

$$CR^1 = CH_2$$

AB Contact lenses with a high O permeability are prepared from copolymers of bisphenol A dimethacrylate and I (R1 = H or Me; R2 = H, Me, Et, Pr, Bu, MeO, C1, NO2, OH or NH2). Thus, 95 parts styrene and 5 parts bisphenol A dimethacrylate were copolymd in the presence of Bz2O2 to form a copolymer [25190-79-8] for use in manufacture of contact lenses.

IT 25190-79-8P 73548-25-1P 85756-94-1P 85756-95-2P

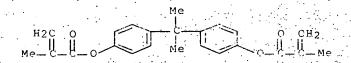
(preparation of; for contact lenses)

RN 25190-79-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)di-4,1-phenylene ester, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 3253-39-2 CMF C23 H24 O4



CM 2

CRN 100-42-5 CMF C8 H8

 $H_2C \longrightarrow CH - Ph$ 

RN 73548-25-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)di-4,1-phenylene ester, polymer with 1-chlcro-2-ethenylbenzene (9CI) (CA ENDEX NAME)

CM 1

CRN 3253-39-2 CMF C23 H24 O4

CM 2

CRN 2039-87-4 CMF C8 H7 C1

RN 85756-94-1 HCAPLUS

2-Propenoic acid, 2-methyl-, (1-methylethylidene)di-4,1-phenylene ester, polymer with 1-ethenyl-4-methylbenzene (9CI) (CA INDEX NAME)

CM :

CRN - 3253-39-2 CMF C23 H24 O4

·CM: 2

CRN 622-97-9 CMF C9 H10

RN 85756-95-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)di-4,1-phenylene ester, polymer with ethenylbenzene and 1-ethenyl-2-methylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 3253-39-2 CMF C23 H24 O4

CM 2

CRN 611-15-4 CMF C9 H10

CM .: : 3

CRN 100-42-5 CMF C8 H8

ri 2 C === C H -- P to

IC G02C007-04; C08F212-04

TCI C08F212-04, C08F220-20

CC 63-7 (Pharmaceuticals)

lT Lanses

(contact, hisphenol methacrylate-styrene detivative polymers for)

TT - 23130-79-82 73548-25-12 85756-94-17-

05756-95-2P

(preparation of, for contact lenses)

L24 ANSWER 49 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1983:149623 HCAPLUS Full-text

DOCUMENT NUMBER:

98:149623

TITLE: Water-absorbing contact lens:

INVENTOR(S): Tanaka, Kyoichi; Kanome, Shinji; Nakajima,

Tatsutoshi; Nakada, Zazuhiko: Toyoshima, Nobuyuki

## 10/549,696

PATENT ASSIGNEE(S): Toyo Contact Lens Co., Ltd., Japan

SOURCE: Fr. Demande, 37 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PAT	TENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR	2505055	A1	19821105	FR 1982-7595	19820430
and the second second	2505055 57181524		19860103 19821109	< JP 1981-67485	19810501
JP.	58065411	Α	19830419	JP 1981-165224	19811015
V. AU	8282681	A	19821104	<	19820416
	550604 2097952	E2	19860327 19821110	GB 1982-11562	19820421
	2097952 3215918	•	19850213 19821202	DE 1982-3215918	19820429
	3215918 APPLN. INFO.:	C2	19860417	JP 1981-67485	A 19810501
				√ UP-1981-165224	A 19811015

ED Entered STN: 12 May 1984

AB Contact lenses having water content sufficient to supply 0 to the eye cornea and excellent affinity for the eye tissues were prepared from copolymers containing glycidyl acrylates or methacrylates, e.g. isopropylidene-2,3-glycerol methacrylate (I) [7098-80-8]. I was prepared by treating 15 g glycidyl methacrylate [106-91-2] with 50 mL Me2CO [67-64-1] in the presence of 100 ppm hydroquinone monomethyl ether and 0.1 g silicotungstic acid. isopropylidene-2,3-glycerol methacrylate-Me methacrylate-N-vinylpyrrolidone copolymer (II) [85266-44-0] was prepared by polymerizing a mixture of the corresponding monomers in the presence of atobisisobutyronitrile. II was shaped into contact lenses, the lenses were scaked successively in 2N HCl (24 h), #20 (15 min), and 0.5% aqueous Na2CO3 (30 min), and then boiled for 1 h in physical saline solution to give a flexible product containing 60.2% H2O and having an O permeability 1.86 + 10-10 mLocm/cm2 s mbar, a refractive index of 1.391, and visible ray transmission >90%

IT 85266-47-3P 85266-56-4P 85266-57-5P

(preparation of, for soft contact lenses).

RN 85266-47-3 HCAPLUS

CN 2 Propanoic acid, 2-methyl-, (2,2-dimethyl-1,3-dioxolon i-yl)methyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate methyl 2-methyl-2-propenoate and sulfonyldi-4,1-phenylene bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM . 1.

CPN 34049-61-1 CMF C20 H18 06 S

CM 2

CRN 7098-80-8 CMF C10 H16 O4

CM 3

CRN 868-77-9 CMF C6 H10 O3

CM 4

CRN 80-62-6. CMF C5 H8 02

RN 85266-56-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, (2-methyl-2-phenyl-1,3-dioxolan-4-yl)methyl 2-methyl-2-propenoate and sulfonyldi-4,1-phenylene bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 85266-55-3 CMF C15 H18 O4

$$\begin{array}{c} \text{Ph} \\ \text{Me} \\ \end{array} \begin{array}{c} \text{O} \\ \text{CH}_2 \\ \text{O} \\ \end{array} \begin{array}{c} \text{C} \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{O} \\ \end{array} \begin{array}{c} \text{C} \\ \text{Me} \\ \end{array}$$

CM 2

CRN 34049-61-1 CMF C20 H18 O6 S

CM 3

CRN 868-77-9 CMF C6 H10 O3

CM 4

CRN 142-90-5 CMF C16 H30 O2

RN 85266-57-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1;4-dioxaspiro[4.5]dec-2-ylmethyl ester, polymer with dodecyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and sulfonyldi-4,1-phenylene bis(2-methyl-2-propenoate) (9CI): (CA INDEX NAME)

CM 1

CRN 85266-53-1 CMF C13 H20 O4

CM . 2

CRN 34049-61-1 CMF C20 H18 O6 S

CM 3

CRN. 868-77-9 CMF C6 H10 O3

. 
$$H2C O$$
 $Me = C = C = O = CH_2 = CH_2 = OH$ 

CM ·

CRN 142-90-5 CMF C16 H30 O2

Me 
$$(CH_2)_{11} = 0 - \frac{0}{6} - \frac{CH_2}{0}$$
 Me

- IC G02B001-04; C08F220-02; C08F226-10; G02C007-04
- CC 63-7 (Pharmaceuticals)
- IT Lenses

(contact, soft, glycerol acrylate or methacrylate copolymers for,
preparation of)

TT 78166-48-0P 85266-44-0P 85266-45-1P 85266-46-2P 85266-47-3P 85266-48-4P 85266-50-8P 85266-51-9P

## 10/549,696

85266-52-0P 85266-54-2P **85266-56-4P 85266-57-5P** 

85266-64-4P

85266-59-7P 85266-60-0P 85266-61-1P 85266-63-3P 85266-65-5P 85266-66-6P 85266-67-7P 85266-68-8P (preparation of, for soft contact lenses)

## => d his nofile

(FILE 'HOME' ENTERED AT 07:28:58 ON 30 AUG 2007)

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FILE 'REGISTRY' ENTERED AT 07:29:18 ON 30 AUG 2007 ·
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              765929-31-5/BI OR 765929-32-6/BI OR 765929-33-7/BI OR .
              765929-34-8/BI OR 765929-35-9/BI OR 765929-36-0/BI OR
              765929-37-1/BI OR 765929-39-3/BI OR 765929-40-6/BI OR
              765929-41-7/BI OR 765943-97-3/BI OR 767330-18-7/BI)
L3
            STR
<u>1</u>4
              STR
L5 .
           SCR 2043
          50 SEA SSS SAM L3 AND L4 AND L5
·L7
       9925 SEA SSS FUL L3 AND L4 AND L5
       11 SEA ABB=ON PLU=ON L7 AND L2
           SAV L7 FRE696/A
   FILE 'HCAPLUS' ENTERED AT 08:03:16 ON 30 AUG 2007
L9 1 SEA ABB=ON PLU=ON L8
         8034 SEA ABB=ON PLU=ON L7
L10
         FILE 'REGISTRY' ENTERED AT 08:03:36 ON 30 AUG 2007
L11 2321 SEA ABB=ON PLU=ON L7 AND 2/NC
L12: 7695 SEA ABB=ON, PLU=ON, L7 AND 2-5/NC
         738 SEA ABB=ON PLU=ON L7 AND 1/NC
          9187 SEA ABBEON PLUEON L7 NOT L13
FILE HCAPLUS ENTERED AT 08:05:51 ON 30 AUG 2007
L15 L C 5589 SEA ABB=ON PLU=ON L14
           1 SEA ABB=ON PLU=ON L1 AND L15
          E LENSES/CT
         21828 SEA ABB=ON PLU=ON LENSES+PFT.NT, OLD, NEW/CT
              E PHOTOCHROMIC MATERIALS/CT
          5726 SEA ABB=ON PLU=ON "PHOTOCHROMIC MATERIALS"+PFT.NT,OLD,NEW
           /CT
             E PHOTOCHROMIC LENSES/CT
          414 SEA ABBEON PLUEON "PHOTOCHROMIC LENSES"+PFT, NT, OLD, NEW/CT
           692 SEA ABBEON PLUEON. L15 AND (L17 OR L18 OR L19)
L20.
          156 SEA ABB=ON PLU=ON L20 AND PHARM?/SC,SX ...
127
1933
           61 SEA ABB=ON PLU=ON L21 AND THU/PL
           1. SEA ABB=ON PLU=ON L22 AND L1
1,25
           49 SEA ABB=ON PLU=ON L22 AND (1840-2003)/PRY, AY, PY
L24
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